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THE

SWISS FAMILY ROBINSON.

In 2 Volumes

Vol. II.

The Boys' Freak.. Page 13.

New York.

J. & J. HARPER, 82 CLIFF STREET.

Harper's Stereotype Edition.

THE

SWISS FAMILY ROBINSON:

OR,

ADVENTURES

OF

A FATHER AND MOTHER AND FOUR SONS

ON A DESERT ISLAND.

THE PROGRESS OF THE STORY FORMING A CLEAR ILLUSTRATION OF THE FIRST PRINCIPLES OF NATURAL HISTORY, AND MANY BRANCHES OF SCIENCE WHICH MOST IMMEDIATELY APPLY TO THE BUSINESS OF LIFE.

FROM THE SEVENTH LONDON EDITION,
GREATLY IMPROVED.

IN TWO VOLUMES.

VOL. II.

NEW-YORK:

HARPER & BROTHERS, 82 CLIFF STREET.

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CONTENTS

OF

THE SECOND VOLUME.

	Page
CHAP. XVI.—A Bathing, a Fishing, the Jumping Hare, and a Masquerade	5
XVII.—More things from the Vessel	18
XVIII.—The Tortoise harnessed . .	23
XIX.—Another Trip to the Wreck .	33
XX.—The Cracker, and the Pinnace	45
XXI.—Gymnastic Exercises—Various Discoveries—Singular Animals, &c.	64
XXII.—Travels into unknown Parts .	84
XXIII.—Useful Occupations and Labours—Embellishments—A painful but natural Sentiment	102
XXIV.—A new Territory—The Troop of Buffaloes—The vanquished Hero	115
XXV.—The Malabar Eagle—Sago Manufactory—Bees . .	134

CHAP. Page

XXVI.—Treatment of Bees—Staircase—Training of various Animals—Manufactures, &c. . 149

XXVII.—The Wild Ass—Difficulty in Breaking it—The Heath-fowl's Nest 165

XXVIII.—Flax, and the Rainy Season . 180

XXIX.—Spring—Spinning—Salt-mine 193

XXX.—House in the Salt-rock—Herring Fishery 210

XXXI.—New Fishery—New Experiments—New Discoveries, and House 221

XXXII.—Completion of two Farm-houses—A Lake—The Beast with a Bill—A Boat . . 239

THE

SWISS FAMILY ROBINSON.

CHAPTER XVI.

A Bathing; a Fishing; the jumping Hare; and a Frolic of the Boys.

At the moment of our starting, Fritz presented his brother and myself with a case of his own workmanship, which we stuck into our belts, and which, in reality, were well contrived for holding spoons, and knives and forks, while room was left in the middle for a little hatchet. I praised Fritz for having thus brought his idea to perfection, and for contriving to make two cases with his skin instead of one.

We had harnessed the ass and the cow to our sledge; we each took a piece of bamboo-cane in hand, to serve as a whip; and resting our guns upon our shoulders, began our journey. Flora was to accompany us, and Turk

to remain behind. We bade adieu to our companions, and put our animals in motion. We took the road by the seashore, where the sands afforded better travelling for our sledge than the thick wild grass. We reached Family Bridge, and arrived at Tent House without any obstacle; and unharnessed the animals to let them graze, while we set to work to load the sledge with the cask of butter, the cask of cheese, a small barrel of gunpowder, different tools, some ball, and some shot. These things had so occupied our thoughts that it was late when we first saw that our animals, attracted by the nice grass on the other side of the river, had repassed the bridge, and wandered so far as to be out of sight. I was in hopes they would be easily found, and told Ernest to go with Flora and bring them back, intending in the mean time to look for a convenient place on the other side of Tent House to bathe in. In a short time I found myself at the end of Providence Bay, which ended, as I now perceived, in a marsh, producing some fine bulrushes; and further on, a chain of steep rocks, advancing into the sea, and forming a kind of creek, as if expressly contrived for bathing. Pleased with this discovery, I called

out to Ernest to come and join me, and in the mean time amused myself with cutting some of the rushes, and thinking what use I could make of them.

I told him to fill a small bag with some of the salt he had formerly seen here, and then to empty it into the large one for the ass to carry; and to take care to fill equally on each side. "During this time, I will be bathing; and then it will be your turn to bathe, and mine to take care of the animals."

I returned to the rocks, and found the bathing delightful; but I did not stay long, fearing my boy might be impatient for his share of pleasure. When I had dressed myself, I returned to the place to see if his work had advanced: presently I heard his voice calling out, "Father, father, a fish! a fish of monstrous size! Run quickly, father, I can hardly hold him! he is eating up the string of my line!" I ran to the place from which the voice came, and found Ernest lying along the ground on his face, upon the end of a point of land, and pulling in his line, to which a large fish was hanging, and struggling to get loose. I ran hastily and snatched the rod out of his hand, for I feared the weight and activity of

the fish might pull him into the water. I gave the line length, to calm the fish, and then drew him gently along into a shallow, and thus he was effectually secured. We examined him thoroughly, and he appeared to weigh not less than fifteen pounds; so that our capture was great, and would afford the greatest pleasure to our good steward of provisions at Falcon's Stream. "You have now really laboured," said I to Ernest, "not only with your head, but with your whole body; and I would advise you to wipe the perspiration from your face, and keep a little quiet before you go into the water. You have procured us a dish of great excellence, which will last for several days, and have conducted yourself well, *without fear and without reproach*."

"It was at least fortunate," observed he, in a modest tone, "that I thought of bringing my fishing-rod."

Father. Certainly it was. But tell me how you came to see this large fish, and what made you think you could catch it?

Ernest. I used to see great quantities of fish in the water, just hereabout, and this made me determine to bring my fishing-tackle with me. In my way to the salt, I saw a

great number of little crabs, upon which fishes feed, near the water's brink; I thought I would try to bait my hook with one of them; so I hastened my work, and came to this spot, where I caught only a dozen little fish, which are there in my handkerchief; but I remarked that they were chased in the water by fishes of larger size. This gave me the idea of baiting my hook with one of the small ones; but the hook was too small, and my rod too weak. I then took one of the finest of the bulrushes you had just gathered, and put a larger hook to my line, and in a short time the large fish you see there seized upon the bait. However, I must confess, that if you had not come to my assistance, I must either have let go my line or have been dragged into the water; for the fish was stronger than I.

We now examined the smaller fishes, which were mostly trout and herrings, while I felt certain that the large one was a salmon. I cut them all open, and rubbed them in the inside with salt, that they might not be injured by the heat. While I was thus employed, Ernest went to the rocks and bathed, and I had time to fill some more bags with salt before his return. We then harnessed and

loaded our animals, and then took the road to Falcon's Stream.

When we had proceeded about half-way, Flora, who was before us, by her barking gave notice that she scented some game. We soon after saw her pursuing an animal, which tried to escape, and made the most extraordinary jumps. The dog continuing to follow, the creature, in trying to avoid her, passed within gun-shot of the place where I stood. I fired, but its flight was so rapid that I did not hit it. Ernest, who was at a small distance behind, hearing the report of my gun, prepared his own, and fired it off at the instant the animal was passing near him, seeking to hide itself among the tall grass just by; he had fired so true that the animal fell dead at the same instant. I ran with curiosity to find out what kind of quadruped it might be. It was as large as a sheep, with the tail like that of a tiger; both its snout and hair were like those of a mouse, and its teeth were like a hare's, but much larger; the fore-legs very like those of the squirrel, and were very short; but to make up for this, its hind-legs were as long as a pair of stilts, and of a strange form. We examined the creature a long time in

silence; I could not be sure that I had ever seen or heard of any thing like it. Ernest at length joyously exclaimed, "And have I really killed this wonderful animal? What will my mother and my brothers say? How astonished they will be! and how fortunate I am in securing so fine a prize! What do you think is its name, father?"

Father. I do not yet know.

Ernest. I think it can hardly be named a quadruped; for the little fore-legs look much more like hands, as is the case with monkeys.

Father. They are, notwithstanding, legs. Let us look for its name among the animals who give suck; on this point we cannot be mistaken. Now let us examine its teeth.

Ernest. Here are the four cutting teeth, like the squirrel.

Father. Then it belongs to the order of nibblers. Now let us think of some names of animals of this kind.

Ernest. Besides squirrels, I recollect only mice, marmots, hares, beavers, porcupines, and jumpers.

Father. Jumpers! the animal is completely formed like the gerboa or jumping-hare, except that it is twice the size of those of which

I have read a description. . . . Wait a moment —an idea strikes me: I think that our animal is one of the large jumpers, called kangaroo; the female, who never bears more than one young one, carries it in a kind of purse placed between her hind-legs. To the best of my knowledge, this animal has never been seen but on the coast of New-Holland, where it was first seen by the celebrated navigator Captain Cook. You may then be highly pleased with your adventure of killing an animal so rare. But now let us see how we shall manage to drag him to the sledge. Ernest begged that I would rather assist him to carry it, as he was afraid of spoiling its beautiful mouse-coloured skin by dragging it on the ground. I therefore tied the fore-legs of the kangaroo together; and by means of two canes, we with considerable trouble contrived to carry it to the sledge.

Having now nothing more to detain us, we continued our road towards Falcon Stream, talking on the subject of natural history, and on the necessity of studying it in our youth, that we might learn to class plants and animals according to their different marks; and we observed, that to such a knowledge as this

it was owing that we had recognised the kangaroo. Ernest begged me to tell him all I knew about the animal. "It is," said I, "a strange kind of creature. Its fore-legs, as you see, have scarcely the third part of the length of the hind ones, and the most it can do is to make them serve the purpose of walking; but the hind-legs enable it to make prodigious jumps, the same as in the flea and the grasshopper. The food of the kangaroo consists of herbs and roots, which they dig up very skilfully with their fore-legs. They place themselves upon their hind-legs, which are doubled under them, as if on a chair, and by this means are able to look above even the tall kinds of grass; they rest too upon their tail, which is very strong, and is also of great use to them in jumping, by assisting the spring from the ground. It is said that the kangaroo if deprived of its tail, would scarcely be able to jump at all."

We at length arrived happily, though somewhat late, at Falcon's Stream. Our companions all ran to meet us: but it was now our turn for immoderate fits of laughter: one of the boys had on a sailor's shirt, which trained round him like a robe; another was

buried in a pair of pantaloons, which were fastened round his neck, and reached to the ground; and the third had a long waistcoat, which came down to the instep. They all tried to jump about, but finding this impossible from the length of their garments, they next tried to carry off the whole with an air, by strutting slowly to and fro, in the manner of a great personage in a theatre. After some hearty laughing, I inquired of my wife what could be the cause of this, and whether she had assisted them in attempting to act for our amusement. She informed me, that her three boys had also been bathing; and that, while thus engaged, she had washed all their clothes; but as they had not dried so soon as she expected, they had become impatient, and had fallen on the chest of sailor's clothes, and each had taken from it what article he had pleased. "I preferred," said she, "that you should see them in this odd sort of dress rather than quite naked, like little savages;" in which opinion I assured her that I heartily joined.

It was now our turn to give an account of our journey: as we went on in our narrative, we presented, one after another, casks, bul-

rushes, salt, fish, and lastly our beautiful kangaroo. It was soon surrounded, examined, and admired by all; and such a variety of questions asked, that Ernest and I scarcely knew which to answer first. Fritz was the only one who was a little silent. I saw plainly by his countenance what was passing in his mind. He was jealous of the good fortune of his brother Ernest; but I also saw that he was struggling manfully against so mean a passion. In a short time he had succeeded so well, that he joined frankly in our conversation and merriment. He came near the kangaroo, and examined it; then turning to his brother, he observed to him in a kind tone, that he had had good luck, and that he must be a good shot to have killed the animal with so little difficulty. "But, father," said he, "when you go again to Tent House, will it not be my turn to accompany you? For here at Falcon's Stream there is nothing new to amuse us: a few thrushes, and some pigeons; this is all we have from day to day, and I find it very tiresome."

"I promise you cheerfully what you desire, my dear boy," said I; "for you have overcome your jealousy and ill-humour which as-

sailed you on witnessing your brother's success with the kangaroo. I therefore promise that you shall accompany me in my very next excursion, which will probably take place to-morrow; and it will be another journey to the vessel. But in the mean time, let me observe to you, that the high opinion I have shown of your prudence and judgment, in leaving you here in charge of your mother and your brothers, ought to be felt by you as more flattering than the praise you would have gained by killing a kangaroo. You have accomplished an important duty in keeping near them all the time, and not suffering yourself to be carried away by such amusements as presented themselves to your fancy; and this conduct has increased my affection and respect for you. Praise is also due to Ernest, for the moderation with which he has felt his triumph in so extraordinary an occurrence; for he has not even told you of my failure in trying to shoot the kangaroo. To master our passions, and to have on all occasions a perfect control of our temper, is of more value than the showing a certain skill in firing off a gun, and happening to kill an animal. In our situation, we are forced to

practise such arts as these; but though we may practise them as necessary for our existence, we have no reason to be proud of them."

We ended the day with our ordinary occupations; I gave some salt to each of our animals, to whom it was an acceptable treat. We then skinned our kangaroo, and put it carefully aside till the next day, when we intended to cut it to pieces, and lay such parts in salt as we could not immediately use. We made an excellent supper on our little fish, to which we added some potatoes; nor were our faithful companions Turk and Flora forgotten. The labours of the day had more than usually disposed us all to seek repose; we therefore said our prayers at an early hour, mounted our ladder, and were soon asleep.

CHAPTER XVII.

More Things from the Vessel.

I AROSE with the first crowing of the cock, descended the ladder, and set about skinning the kangaroo, taking care not to spoil its beautiful smooth coat. Our dogs relished their meal on the entrails of the animal so much, that they tried to eat the carcass. Before I could descend they had got off its head, as it hung by the hind-feet; and half friends, half foes, they were going to share their prize when I made my appearance. I thought it right to give them a slight correction for their fault. My wife, awaked by the growling they made as they slunk away to the hollow of a tree, was alarmed, and came down the ladder to see what was the matter; and now I had to perform the further task of appeasing her kind heart for what she called a cruel act. "Kind-hearted creature," said I, "well I know how glad you would be if there were not a stick in the world! But I did not beat Turk and Flora through anger, but from prudence

and precaution: they intended modestly only to eat up our kangaroo, which you promised yourself such pleasure in cooking; and unable as I was to talk to them, and teach them that it was not placed there for their use, it was proper to let them know this in such a way as to hinder them in future; otherwise, as they are strongest, they would end by eating all our stock."

My wife owned I was in the right. I now set about stripping my kangaroo, without injuring the skin; but I advanced so slowly in the business, that my family were assembled about us before I had finished my work. Having at last completed it, I went to the river to wash myself thoroughly, and then to the sailor's chest to change my coat, that I might appear with decency at breakfast, and give my sons an example of that cleanliness which their mother was so eager to teach. Breakfast over, I ordered Fritz to get ready for Tent House, where we should prepare the boat, and go to the vessel.

After taking leave of my wife, we began our journey. I left Flora with her, and begged her not to be uneasy, and to commit herself to the care of that kind Providence who had

till then so graciously watched over us, and who would again bring us back to her safe, enriched with many things for our comfort. I left her bathed in tears, and praying God that this might be the last trip to the vessel.

We took Ernest and Jack a little way with us, and then I sent them back with a message to their mother, which I could not deliver myself—that we might be forced to pass the night on board the vessel, and not return till the evening of the next day. I told my sons how they should sooth their mother: I begged them to obey and to assist her; and that their walk might not be useless I directed them to gather some salt, and bade them be at Falcon's Stream before noon.

We got into the boat, quickly cleared Safety Bay, and reached the vessel. When we had fastened our boat, our first care was to select fit materials to make a raft. Our boat of staves had neither room nor strength enough to carry a great burthen; we therefore looked about, and found a number of water-casks, which seemed to me proper for my new enterprise. We emptied them, replaced the bungs, and threw the casks overboard, after securing them with ropes, so as to keep them

together at the vessel's side: this done, we placed a number of planks upon them, to form a firm platform or deck, to which we added a gunwale of a foot in depth all round. Thus we fixed a handsome raft, in which we could stow thrice as much as in our boat. This task had taken up the whole day; we scarcely allowed ourselves a minute to eat. In the evening, Fritz and I were so weary that it would have been impossible for us to row back to land; so we lay down in the captain's cabin, on a good mattress, which induced such sound sleep that our design to watch in turn, for fear of accident, was forgot, and we both slept heavily, side by side, till daylight opened our eyes. We rose, and set to work to load our raft.

We began with stripping the cabin of its doors and windows: next we secured the carpenter's and gunner's chests, containing all their tools; those we could remove with levers and rollers were put entire upon the raft, and we took out of the others what made them too heavy. One of the captain's chests was filled with costly articles, which no doubt he meant to sell to the opulent planters of Port Jackson, or to the savages. There were several gold

and silver watches, snuff-boxes, buckles, shirt-buttons, necklaces, rings; in short, an abundance of all the trifles of European luxury. But the article that pleased me most was a chest filled with some dozens of young plants of every species of European fruits. I beheld, with a feeling I cannot describe, those productions of my dear country which once embellished my rural dwelling, and which I might hope would thrive in a foreign soil. We found a number of bars of iron, large pieces of lead, grinding-stones, cart-wheels, tongs, shovels, ploughshares, rolls of iron and copper wire, sacks full of maize, pease, oats, vetches, and even a little hand-mill. We found too a saw-mill, in a separated state, but each piece numbered, and so well fitted that nothing was easier than to put it together for use.

We with difficulty finished our loading, having added a large fishing-net, and the vessel's great compass. With the net Fritz found two harpoons and a rope-windlass, such as they use in the whale-fishery. He asked me to let him place the harpoons, tied to the end of the rope, over the bow of our tub-boat, and thus be in readiness in case of seeing any large fish; and I indulged him.

Having executed our undertaking, we stepped into the tub-boat, and pushed out for the current, drawing our raft after us with a stout rope, which we had been careful to fasten securely at its head.

CHAPTER XVIII.

The Tortoise harnessed.

The wind was good, and briskly filled our sail. The sea was calm, and we advanced at a rapid rate. Fritz had for some time fixed his eyes on something of a large size which was floating on the water, and he now desired me to take the glass, and see what it could be. I soon saw that it was a tortoise, which had fallen asleep in the sun on the top of the water. Fritz then entreated me to steer softly in view of so strange a creature. I consented; but as his back was towards me, and the sail between us, I did not observe his motions, till a violent jerk of the boat gave me the necessary explanation. "For Hea

ven's sake, what are you about, Fritz," exclaimed I.

"I have caught him!—I touched him!" cried Fritz, without hearing one word I had been saying.—"The tortoise is ours."

I soon perceived that the harpoon had caught the animal, which, feeling itself wounded, thus agitated the vessel in its efforts to get away. I quickly pulled down the sail, and seizing a hatchet, sprang to the boat's head to cut the rope, and let the harpoon and tortoise go; but Fritz caught hold of my arm, begging me to wait a moment, and he proposed watching himself with the hatchet in his hand, to cut the rope, should any sign of danger appear; and I yielded to his request.

Thus, then, drawn along by the tortoise, we proceeded with a dangerous rapidity. I soon saw that the creature was making for the sea; I therefore again hoisted the sail: and as the wind was to the land, and very strong, the tortoise found resistance of no avail: he accordingly fell into the track of the current, and drew us straight towards our usual place of landing. The state of the tide was such as to throw us upon a sandbank, within gunshot of the shore: the boat, though

driven with violence, remained upright in the sand. I stepped into the water, which did not reach far above my knees, for the purpose of conferring upon our conductor his just reward for the alarm he had caused us, when he suddenly gave a plunge, and then disappeared. Following the rope, I presently saw the tortoise at the bottom of the water, where it was so shallow that I soon found means to put an end to his pain, by cutting off his head with the hatchet. Being now near Tent House, Fritz gave a halloo, and fired a gun, to inform our relatives that we had arrived in triumph. The mother and her three young ones soon appeared, running towards us; upon which Fritz jumped out of the boat, placed the head of our prize on the muzzle of his gun, and walked to the shore, which I reached at the same moment.

After some gentle reproaches from my wife for leaving her and the boys for so long a time, the history of the tortoise was related. The tender-hearted mother, after heaving a sigh for the hard fate of the creature, began to shudder at the thought of the danger we had been exposed to, and our escape.

Our conversation ended, I begged my wife

to go with two of the younger boys to Falcon's Stream, and fetch the sledge and the beasts of burden, that we might put a part of our booty from the ship under shelter that same evening. A tempest, or even the tide, might sweep away the whole during the night! We took every step in our power against the latter danger, by fixing the boat and the raft as securely as we could without an anchor. I rolled two masses of lead, with the help of levers, from the raft upon the shore, and then tied a rope to each, the other ends of which were fastened, one to the raft, and the other to the boat, and thus satisfied myself that they were safe.

While we were employed on this scheme, the sledge arrived, and we placed the tortoise upon it, and also some mattresses, pieces of linen, &c.; for I thought that the animal itself weighed at least three hundred pounds. The strength of our whole party was found necessary to move it from the raft to the sledge; we therefore all set out together to unload it again at Falcon's Stream.

Our first concern on reaching our abode was the tortoise, which we immediately turned on his back, that we might strip off the shell,

and make use of some of the flesh while it was fresh. The upper shell of the tortoise is extremely convex; the under, on the contrary, is nearly flat. I cut away as much of the flesh of the animal as was sufficient for a meal, recommending to my wife to cook it, with no other seasoning than a little salt, and pledged myself that she would produce a luxurious dish.

"Oh dear papa," cried Francis, "do give me the shell!"

"No, no," bawled out another; and one and all contended for it. I imposed silence, declaring that the right was entirely in Fritz; "but," continued I, "it may be well to ask what each of you thought of doing with the shell, if he had it?"

Ernest. *I* should turn it into a shield to defend myself with.

Father. But let us see in what way you would use it. You would fling it across your shoulders, no doubt, and take to your heels manfully. I have guessed right, my poor Ernest, have I not? And you, Jack, what have you to say?

Jack. I should make a little boat of it, which would help to amuse us all. I was thinking

how cleverly we could fill it with potatoes, or the other things we want to take from Tent House to Falcon's Nest; it would glide along so nicely with the stream, and we should be saved all the fatigue we now have in carrying them.

Father. Your scheme, I grant, is good; but a small raft, or an old chest, would do just as well for your purpose. And now for my little Francis; I wonder what plan he had thought of?

Francis. I thought I should build a little house, papa, and the shell would make such a nice roof to it!

Father. Very well, my lads, if we had only our amusement or our ease to think of; but I want you all to form the habit of thinking and acting for the general good, rather than that of what will most gratify his single self. Now let me ask to what use Fritz had intended to apply it?

Fritz. I thought, father, of cleaning it, and fixing it by the side of our river, and keeping it always full of pure water for my mother's use, when she has to wash the linen or cook our victuals.

Father. Excellent, my boy! all praise to

the founder of the *pure-water tub!* This is what I call *thinking for the general good.* And we will take care to execute the idea as soon as we can get some clay as a foundation for its bottom.

Jack. I have got some clay, which I have put by to keep for use, behind those old roots yonder.

Father. And where did you get it, boy?

Mother. Oh, to my cost I know where the clay was got. This morning early my young hero falls to digging on the hill you see to the right, and home he comes with the news that he had found a bed of clay; but so dirty himself that we were obliged to think next of the washing-tub.

Jack. And if I had minded a little dirt, mother, I should not have found this bed of clay, which you will see will be of great use to us. As I was returning from looking for potatoes, I came to a large slope, watered by the river; it was so slippery that I could not keep upon my legs; so I fell, and dirtied myself all over: on looking, I saw that the ground was all of clay, and almost liquid; so I made some of it into balls, and brought them home.

Ernest. When the water-tub is complete, I will put some roots I have found to soak a little in it, for they are now very dry. I do not exactly know what they are; they look something like the radish, or horse-radish; but the plant from which I took them was almost the size of a bush: I have not yet tasted the roots, though I saw our sow eat heartily of them.

Father. I think your roots are *manioc*, of which the natives of the West Indies make a sort of bread, or cake, which they call *cassave*. Try to find the same place, and bring a quantity for our first experiment.

We had finished unloading the sledge, and I bade the three eldest boys accompany me to fetch another load before it should be dark. We left Francis and his mother busy in preparing for supper; the tortoise having presented itself most fitly for this purpose.

Having reached the raft, we took from it as many things as the sledge could hold, or the animals draw along. One object was to secure two chests which contained the clothes of my family, which I knew would afford the highest pleasure to my wife, who had frequently lamented that they were all forced to

wear clothes that were not their own ; remind ing her at every moment, she said, how much they might be wanted by their proper owners. I reckoned also on finding in one of the chests some books, and principally a large handsomely printed Bible. I added to these four cart-wheels and a hand-mill for grinding ; which, now that we had found the manioc, I thought of signal importance. These and a few other articles completed our present load.

On our return to Falcon's Nest, we found my wife looking anxiously for our arrival, and ready with the welcome she had promised of an ample repast. Before she had well examined our new stores, she drew me, with one of her sweetest smiles, by the arm,— "Step here," said she, and leading to the shade of a tree ; "this is the work I performed in your absence," pointing to a large cask half-sunk in the ground, and the rest covered over with branches of trees. She then applied a small corkscrew to the side, and filling the shell of a cocoanut with the contents, presented it to me. I found the liquor equal to the best canary I had ever tasted. "How then," said I, "have you performed this new miracle ? I cannot believe the wonderful bag

produced it."—"Not exactly," replied she: "for this time it was an obliging wave which threw it on shore. I took a little ramble in your absence yesterday, to see what I could find, and well my trouble was rewarded! The boys ran for the sledge, and had but little difficulty in getting the cask to Falcon's Stream, where we dug this place in the earth to keep it cool."

My wife now proposed that all should be regaled with some of the delicious drink. My own share so strengthened me, that I found myself able to complete my day's work, by drawing up the mattresses we had brought from the ship, to our chamber in the tree, by means of a pulley. When I had laid them, they looked so inviting that I could scarcely resist my desire of at once committing myself to the kind relief they seemed to offer me.

But now the smell of the tortoise laid claim to my attention. I hastened down, and we all partook heartily of the luxurious treat. We returned thanks to God, and speedily retired to taste the blessing of sound repose upon the mattresses.

CHAPTER XIX.

Another Trip to the Wreck.

I AROSE before day to go to the seaside, and inspect our two vessels. I gently descended the ladder without awaking my family. Above, the scene was all repose; below, every thing was in life and motion. The dogs jumped about me, the cock and the hens flapped their wings, and our goats shook their long beards as they browsed. I quickly harnessed the ass, and the dogs followed without bidding. As I approached the shore, I soon saw that the boat and raft had resisted the tide, though it had partially heaved them up. I got quickly on the raft, took a small loading, and returned to Falcon's Stream in time for breakfast; but not a single creature of its inhabitants appeared, though the sun was high above the horizon. I gave a shout as loud as a war-whoop, which awoke my wife. "Really, my dear," said she, "there must be a charm in the mattress you brought yesterday, that has lulled us into so sound a sleep."—"Up, my

lads," exclaimed I, once again. Fritz, a little ashamed, was dressed first; Jack soon after him, and Francis next; Ernest was the last. —"It is so pleasant," cried he, "to lose one's self again after having been awakened! one feels sleep come on afresh so gently."—"But it is my duty to tell you, Ernest, that he who indulges himself in all that flatters his senses will end by falling a victim to them."

After this short reproof, we all came down; and breakfast over, were turned to the seaside to finish the unloading of the raft, that it might be ready for sea on the ebbing of the tide. We were not long in taking two cargoes to Falcon's Stream. At our last trip the water was nearly up to our craft. I sent back my wife and the boys, and remained with Fritz till we were quite afloat; when observing Jack still loitering near, I guessed at his wish, and consented to his going with us. Shortly after, the tide was high enough for us to row off. Instead of steering for Safety Bay, I was tempted by a fresh sea-breeze to go out again to the wreck; but it was too late to undertake much, and I was unwilling to cause my dear wife uneasiness by passing another night on board. I therefore determined to bring away

only what could be obtained with ease and speed. Jack was up and down everywhere in the ship, at a loss what to select; and when I saw him again, he drew a wheelbarrow after him, shouting that he had found something in which to carry our potatoes.

But Fritz had still better news, which was, that he had discovered behind the bulkhead amid-ship, a pinnace (*i. e.* a small boat, the forepart of which is square) taken to pieces, with all its parts, and even two small guns for its defence. This news so delighted me that I instantly ran to the bulkhead; but I soon perceived that to put it together, and launch it, would be a very hard task. I collected various things,—a copper boiler, some plates of iron, tobacco-graters, two grinding-stones, a small barrel of gunpowder, and another full of flints, which I much valued. Jack's wheelbarrow was not forgotten; two more were afterward found and added, with straps belonging to them. All these articles were hurried into the boat, and we re-embarked with speed, to avoid the land-wind that rises in the evening. As we were drawing near to shore, we were struck with the appearance of a group of small figures ranged in a long

line on the strand, that seemed to be viewing us attentively: they were dressed in black, and all uniform, with white waistcoats and full cravats: the arms of these beings hung down carelessly; now and then, however, they seemed to extend them tenderly, as if they wished to offer us a token of friendship.

"I really think," said I to the boys, who were steadfastly gazing at them, "that we are in the country of the pigmies, and that they wish to form a friendly alliance with us."

Jack. Oh, no! father, they are certainly Lilliputians, though somewhat bigger than those of whom I read the description in Gulliver's Travels.

"You then, child," said I, "consider those travels as true; that there is an island of Lilliput, and inhabited by dwarfs?"

Jack. Gulliver says so. He met also with men of great stature, besides an island inhabited by horses—

"And yet I must tell you that the only reality is the rich imagination of the author, whose taste and feeling led him to resort to allegory for the purpose of showing grand truths. Do you know, Jack, what an allegory is?"

"It somewhat resembles a parable, I believe."

"Right; one is very similar to the other."

Jack. And the pigmies you mentioned,—are any to be found?

"No more than there are Lilliputians; they exist only in fiction, or in the erroneous account of some ancient navigators, in which a group of monkeys has been described as small men."

Fritz. Such probably are the beings that we see now stretching out their arms towards us. Ah! now I begin to perceive that they have beaks, and that their arms are short wings: what strange birds!

"You are right, son; they are penguins or ruffs. Ernest killed one soon after our arrival. They are good swimmers, but cannot fly; and so frightened are they when on land, that they run in the silliest way into danger."

While we were talking I steered gently towards shore, to enjoy the sight longer; but the very moment we got into shallow water, my giddy Jack leaped up to his waist into it, and was quickly on land, battering with his stick among the penguins before they were aware of his approach, so that half a

dozen of them were immediately laid flat; the remainder plunged into the sea, dived, and disappeared.

As the sun went down, and we despaired of finishing before night set in, each of us filled a barrow, in order to take home something. I requested that the tobacco-graters and iron plates might be in the first load.

Arrived at Falcon's Stream, my wife exhibited a good store of potatoes, which she had gathered during our absence, and a quantity of the roots I had taken for manioc, and in which I was not mistaken.

"Now," said I, "for some supper and repose; and if my little workmen should be industriously inclined to-morrow, I shall reward them with the novelty of a new trade to be learned." This did not fail to excite the curiosity of all; but I made them wait till the following day for the explanation I had to give.

I waked the boys very early, reminding them that I had promised to teach them a new trade. "What is it? what is it?" exclaimed they all at once, springing suddenly out of bed, and hurrying on their clothes.

Father. It is the art of the baker, my boys.

ing with great force as a press on the bag of manioc, caused the sap it contained to run in streams, which flowed plentifully on the ground.

Fritz. This machine of yours, father, though simple, is as good as can be.

Father. Certainly. It is the simplest lever that art can furnish, and may be made extremely useful.

Ernest. I thought that levers were never used but for raising heavy masses, such as blocks of stone; I had no notion that they were ever used for pressing.

Father. But you see that the point at which the lever rests on the planks must always be the point of rest; the point at which its end touches the roots of the tree would no doubt be that of the raising power, if the root was not too strong to yield to the point of the lever; but then the resistance at the point of rest is still stronger, and presses completely, as you see, the contents of the bag. The negroes, however, have another manner of doing; they make of the bark of a tree a kind of basket of tolerable size; they fill it with manioc, and press it so tightly that the baskets become shorter, and increase in breadth; they then

hang the baskets to the strongest branches of trees, and fasten large stones to them, which draw the baskets again lengthwise; by which action upon the manioc the sap runs out at the openings left in the basket.

Mother. Can one make no use of this sap?

Father. Certainly, we may: the same negroes use it as food, after mixing with it some pepper; and when they can procure them, some sea-crabs.

Fritz. Father, it no longer runs a single drop; may we not now set about making the dough?

Father. I have no objection; but as there are some poisonous kinds of manioc, it will be prudent to make only a small cake at first, by way of experiment, which we will give to the monkey and the fowls and wait to see the effect, instead of using our whole store at once.

We now opened the bag, and took out a small quantity of the pollard, which already was dry enough; we stirred the rest about with a stick, and then replaced it under the press. The next thing was to fix one of our iron plates, which was of a round form, and a little hollow, so as to rest upon two blocks of stone at a distance from each other; under this we

lighted a large fire, and when the iron plate was completely heated, we placed a part of the dough upon it with a wooden spade. As soon as the cake began to be brown underneath it was turned, that the other might be baked also.

Ernest. O how nicely it smells! what a pity that we may not eat some of it immediately!

Father. I believe you might safely venture; but it is perhaps better to wait till the evening, and run no greater risk than the loss of one or two of our fowls or of the monkey.

As soon as the cake was cold, we broke some of it into crumbs, and gave it to two of the fowls, and a larger piece to the monkey, who nibbled it with a perfect relish, making all the time a thousand grimaces.

Fritz. Now tell me, father, how the savages manage to grate their manioc, for surely they have not, like us, an instrument fitted for the operation; and tell me also, if they call their composition by the name of cake or bread, as we do?

Father. The savages, having no such article as bread in their bill of fare, have consequently no word in their language to express it. At the Antilles, the bread from the manioc

is called *cassave;* the savages make a kind of grater with sharp stones or shells; or when they can get nails, on which they set a high value, they drive them into the end of a plank, and rub the manioc upon it. But now, I pray you, good wife, give us quickly our potato dinner, and we will afterward resume the baking trade.

The first thing after dinner was to visit our fowls. Those which had eaten the manioc were in excellent condition, and no less so the monkey.—"Now then to the bakehouse, young ones," said I. The grated manioc was soon emptied out of the bag, a large fire was quickly lighted, and I placed the boys where a flat surface had been prepared for them, and gave to each a plate of iron and the quantity of a cocoanut full to make a cake apiece, and they were to try who could succeed the best. They were ranged in a half-circle round me, that they might observe how I proceeded, and adopt the same method for themselves. The result was not discouraging for a first experiment, though it must be confessed we were now and then so unlucky as to burn a cake. My little rogues could not resist the pleasure of frequently tasting their cake, a little bit at a

along. We put out for the current, though not without considerable fear of finding that the wreck had disappeared. We soon, however, saw that it still remained firm between the rocks.

Having got on board, all repaired to that part of the vessel called the bulkhead, which contained the pinnace. On further observation, it appeared to me that the plan we had formed was subject to at least two great difficulties; the one was the situation of the pinnace in the ship, and the other was the size and weight it would acquire when put together. The enclosure which contained the pinnace was in the interior of the ship, and timbers of great bulk and weight separated it from the breach, and in this part of the deck there was not sufficient space for us to put the pinnace together, or to give her room when done. The breach also was too narrow to admit of her being launched from this place as we had done with our tub-raft. In short, the separate pieces of the pinnace were too heavy for us to remove them even with the assistance of all our strength. What therefore was to be done? I stood on the spot reflecting, while the boys were running from

place to place, carrying every thing they could find on board the raft.

The place which contained the pinnace was lighted by several small cracks in the timbers, which, after standing in the place a few minutes to accustom the eye, enabled one to see sufficiently to distinguish objects. I discovered, with pleasure, that all the pieces of which she was composed were so well arranged and numbered, that without too much presumption, I might flatter myself with the hope of being able to collect and put them together, if I could be allowed the necessary time, and could procure a convenient place. I therefore decided on the undertaking; and we immediately set about it. We proceeded at first so slowly as to have produced discouragement, if the desire of possessing so fine a little vessel, quite new, perfectly safe, easy to conduct, and which might at some future day be the means of our deliverance, had not at every moment inspired us with new strength and ardour.

Evening, however, was approaching, and we had made but small progress; we were obliged to think of our promise to my wife; and so we left our occupation and re-embarked.

On reaching Safety Bay, we found there our kind steward and little Francis; they had been, during the day, employed in arrangements for our living at Tent House as long as we should have occasion to continue our trips to the vessel: this she did to shorten the length of the voyage, and that we might be always in sight of each other. In return for her kindness, I made the best display I could of two casks of salted butter, three of flour, some small bags of millet-seed and of rice, and some other articles of utility and comfort for our establishment; and the whole was removed to our storehouse at the rocks.

We passed a whole week in this arduous undertaking of the pinnace. I embarked every morning with my three sons, and returned every evening, and never without some small addition to our stores. We were now so accustomed to this manner of proceeding, that my wife bade us good-by without concern, and we, on our parts, left Tent House without anxiety; she even had the courage to go several times, with no companion but her little Francis, to Falcon's Stream, to feed and take care of the poultry, and to bring

back potatoes for our use. As night successively returned, we had a thousand interesting things to tell each other, and the pleasure of being together was much increased by these short separations.

At length the pinnace was completed, and in a condition to be launched: the question now was, how to manage this remaining difficulty. It was probable she would sail well, from the lightness of her construction, and in consequence drawing but little water. We had pitched and towed all the seams, that nothing might be wanting for her complete appearance: we had even taken the pains of mounting her with two small cannon of about a pound weight; and, in imitation of larger vessels, had fastened them to the deck with chains. But in spite of the delight we felt in looking at a work, as it were, of our own industry, the great difficulty still remained: the little vessel still stood fast, enclosed within four walls; nor could I conceive of a means of getting her out. To effect a passage through the outer side of the vessel, by means of our united industry, seemed to present a prospect of exertions beyond the reach of man, even if not attended with dangers the

most alarming. Despairing, then, of being able to find a means consistent with the sober rules of art, my fancy inspired the thought of a project, which could not however be tried without great hazard and danger.

I had found on board a strong iron mortar, such as is used in kitchens. I took a thick oak plank, and nailed to different parts of it some large iron hooks: with a knife I cut a groove along the middle of the plank. I sent the boys to fetch some match-wood from the hold, and I cut a piece long enough to continue burning at least two hours. I placed this train in the groove of my plank: I filled the mortar with gunpowder, and then laid the plank upon it, having previously pitched the mortar all round; and, lastly, I made the whole fast to the spot with strong chains, crossed by means of the hooks in every direction. Thus I made a sort of cracker, from which I expected to effect a happy conclusion. I hung this machine of mischief to the side of the bulkhead next the sea, having taken previous care to choose a spot in which its action could not injure the pinnace. When the whole was arranged, I set fire to the match, the end of which projected far enough

beyond the plank to allow us sufficient time to escape. I now hurried on board the raft, into which I had sent the boys before applying a light to the match; and who, though they had assisted in forming the cracker, had no suspicion of the use for which it was intended, and believing all the while it concealed some subject of amusement for their next trip to the vessel.

On our arrival at Tent House, I immediately put the raft in a certain order, that she might be in readiness to return speedily to the wreck, when the noise produced by the cracker should have informed me that my scheme was completed. We set busily to work in emptying her; and during the occupation, our ears were assailed with a noise of such violence, that my wife and the boys, who were ignorant of the cause, were so alarmed as instantly to abandon their employment. "What can it be?—what is the matter?" cried all at once. "It must be cannon. It is perhaps the captain and the ship's company who have found their way hither! Or can it be some vessel in distress? Can we go to its relief?"

Mother. The sound comes in the direction of the wreck: perhaps she has blown up.

Father. If this is the case, we had better return immediately, and convince ourselves of the fact? Who will be of the party?

"I, I, I," cried the boys; and the three young rogues lost not a moment in jumping into their tubs, whither I soon followed them, after having whispered a few words to my wife, somewhat tending to explain, but still more to calm her during the trip we had now to engage in.

We rowed out of the bay with more rapidity than on any former occasion. When the vessel was in sight, I saw with pleasure that no change had taken place in the part of her which faced Tent House, and that no sign of smoke appeared: we advanced, therefore, in excellent spirits; but instead of rowing, as usual, straight to the breach, we proceeded round to the side on the inside of which we had placed the cracker. The horrible scene of devastation we had caused now broke upon our sight. The greater part of the ship's side was shivered to pieces: the whole exhibited a scene of terrible destruction, in the midst of which presented itself our pinnace, entirely free from injury! I could not refrain from the liveliest exclamations of joy,

which excited the surprise of the boys, who had felt the disposition such a spectacle naturally inspired, of being dejected. They fixed their eyes upon me with the utmost astonishment. "Now then she is ours!" cried I; "the pinnace is ours! for nothing is now more easy than to launch her. Come, boys, jump upon her deck, and let us see how quickly we can get her down upon the water."

Fritz. Ah! now I understand you, father; you have yourself blown up the side of the ship with that machine you contrived in our last visit, that we might be able to get out the pinnace; but how does it happen that so much of the ship is blown away?

Father. I will explain all this to you when I have convinced myself that the pinnace is not injured, and that there is no danger of any of the fire remaining on board; let us examine.

We entered by the new breach, and had soon reason to be satisfied that the pinnace had wholly escaped from injury, and that the fire was entirely extinguished. The mortar, however, and pieces of the chain, had been driven forcibly into the opposite side of the enclosure. Having now every reason to be satisfied and tranquil, I explained to the boys the nature of

a cracker, the manner of its operation, and the important service for which I was indebted to the old mortar.

I then examined the breach we had thus effected, and next the pinnace. I perceived that it would be easy, with the help of the crow and the lever, to lower her into the water. In putting her together, I had used the precaution of placing her keel on rollers, that we might not experience the same difficulty as we had formerly done in launching our tub-raft. Before letting her go, however, I fastened the end of a long thick rope to her head, and the other end to the most solid part of the wreck, for fear of her being carried out too far. We put our whole strength to this undertaking, and soon enjoyed the pleasure of seeing our pinnace descend into the sea; the rope keeping her sufficiently near, and enabling us to draw her close to the spot where I was loading the tub-boat, and where, for that purpose, I had fixed a pulley on a projecting beam, from which I was enabled also to advance with the completing of the necessary masts and sails for our new barge. I tried to recollect minutely all the information I had ever possessed on the art of rigging a

vessel; and our pinnace was shortly in a condition to set sail.

On this occasion, a spirit of military affairs was awakened in the minds of my young group, which was never after extinguished. We were masters of a vessel mounted with two cannon, and furnished amply with guns and pistols! This was at once to be in a condition for resisting and destroying the largest fleet the savages could bring upon us! The boys even almost wished they might assail us. For my own part, I answered their youthful enthusiasm with prayers that we might ever escape such a calamity as the being compelled to use our firearms. Night surprised us before we had finished our work, and we accordingly prepared to return to Tent House, after drawing the pinnace close under the vessel's side. We arrived in safety, and took great care not to mention our new booty to the good mother till we could surprise her with a sight of it in a state of entire completeness.

Two whole days more were spent in equipping and loading the beautiful little barge we had now secured. When she was ready for sailing, I found it impossible to resist the earnest importunity of the boys, who wished

to salute their mother, on their approach to Tent House, with two discharges of cannon. These accordingly were loaded, and the two youngest placed themselves, with a lighted match in hand, close to the touch-holes, to be in readiness. Fritz stood at the mast, to manage the ropes and cables, while I took my station at the rudder. These matters being ready, we put off with sensations of joy, which was shown by loud huzzas. The wind was favourable, and so brisk that we glided with the rapidity of a bird along the waters; and while my young ones were transported with pleasure by the swiftness of the motion, I could not myself refrain from shuddering at the thought of some possible danger.

Our old friend the tub-raft had been deeply loaded, and fastened to the pinnace, and it now followed as an accompanying boat to a superior vessel. We took down our large sail as soon as we found ourselves at the entrance of Safety Bay, to have the greater command in steering the pinnace; and soon the smaller ones were lowered one by one, that we might the more securely avoid being thrown with violence upon the rocks along the coast: thus moving at a slower rate, we had greater facili-

ties for managing the cannon. Arrived within a certain distance—"*Fire!*" cried Commander Fritz. The rocks behind Tent House returned the sound. "*Fire!*" said Fritz again; Ernest and Jack obeyed, and the echoes again replied. Fritz at the same moment had discharged his two pistols, and all joined instantly in three loud huzzas.

"Welcome! welcome, dear ones!" was the answer from the anxious mother, almost breathless with astonishment and joy. "Welcome!" cried also little Francis, with his feeble voice, as he stood clinging to her side, and not well knowing whether he was to be sad or merry. We now tried to push to shore with our oars in a particular direction, that we might have the protection of a projecting mass of rocks, and my wife and little Francis hastened to the spot to receive us: "Ah!" cried she, "what a fright have you, and your cannon, and your little ship thrown me into! I saw it advancing rapidly towards us, and was unable to conceive whence it could come, or what it might have on board: I stole with Francis behind the rocks, and when I heard the firing, I was near sinking to the ground with terror; if I had not the moment after

heard your voices, God knows where we should have run to—but come, the cruel moment is now over, and, thanks to Heaven, I have you once again in safety! But tell me where you got so unhoped-for a prize as this little vessel? In good truth, it would almost tempt me once more to venture on a sea-voyage, especially if she would promise to convey us back to our dear country!"

Fritz now invited his mother to get on board, and gave her his assistance. When they had all stepped upon the deck, they entreated for permission to salute, by again discharging the cannon, and at the same moment to confer on the pinnace the name of their mother—*The Elizabeth.*

My wife was particularly gratified by these our late adventures; she praised our skill and perseverance: "but do not," said she, "think that I bestow so much praise without the hope of some return in kind: on the contrary, it is now my turn to claim from you, for myself and little Francis, the same sort of recompense; for we have not, I assure you, remained idle while the rest were employed. No, not so; little Francis and I found means to be doing something also; though not at

this moment prepared to furnish such proofs as you, by firing cannon, &c.; but wait a little, good friends, and our proofs shall be apparent in some dishes of vegetables which we shall be able to regale you with. It depends, to say the truth, only on yourselves, dear ones, to go with me, and see what we have done."

Taking her little Francis by the hand, she led the way, and we followed in the gayest mood imaginable. She conducted us up an ascent of one of our rocks, and stopping at the spot where the fall is formed from the river, she displayed to our eyes a handsome kitchen-garden, laid out properly in beds and walks, and, as she told us, everywhere sowed with the seed of useful plants.

"This," said she, "is the work we have been engaged in, if you will kindly think of it. In this spot the earth is so light that Francis and I had no difficulty in working in it, and then dividing it into different beds; one for potatoes, one for manioc, and other smaller shares for lettuces of various kinds, not forgetting to leave room to receive some plants of the sugar-cane. You, dear husband, and Fritz, will easily find means to conduct water hither from

the fall, by means of pipes of bamboo, to keep the whole in health; and we shall have a double source of pleasure from the general prosperity; for both the eye and the palate will be pleased. But you have not yet seen all; there, on the slope of the rock, I have transplanted some plants of the ananas. Between these I have planted some melon-seeds, which cannot fail to succeed, thus securely sheltered, and in so warm a soil: here is a plat allotted to pease and beans, and this other for all sorts of cabbage. Round each bed or plat I have planted corn, on account of its tall and bushy form, to serve as a border, which at the same time will protect my young plants from the heat of the sun."

I stood delighted in the midst of so perfect an exhibition of the kind zeal and industry of this most amiable of women! I could only exclaim, that I should never have believed in the possibility of such a labour in so short a time, and particularly with so much privacy as to leave me wholly unsuspicious of the existence of such a project.

Mother. To confess the truth, I scarcely myself expected to succeed, so I resolved to be silent. But as I found my calculations

answer better than I expected, I was encouraged, and the hope of surprising you so agreeably gave me new strength and activity. I, however, was not without my suspicions that your daily visits to the wreck were connected with some great mystery, which at a certain time you would unfold. So, mystery for mystery, thought I; and thus, my love, it has turned out. Though acting in different directions, one only object has been our mutual aim—the substantial good of our beloved companions of the desert!"

After a few jocose remarks, we moved towards Tent House. This was one of our happiest days; for we were all satisfied with ourselves and with each other; and I led my children to observe the goodness of God, who renders even labour a source of enjoyment, and makes our own happiness result from that of the objects of our affection.

"I had almost forgot, though," said my wife, after a short pause, "one little reproach I had to make you; your trips to the vessel have made you neglect the bundle of fruit saplings we laid together in mould at Falcon's Stream; I fear they by this time must be dying for want of planting, though I took care

to water and cover them with branches. Let us go, my love, and see about them."

I readily consented, as many other matters required our presence at Falcon's Stream We had now in possession the greater part of the cargo of the vessel; but almost the whole of these treasures were at present in the open air, and liable to injury from both sun and rain.

My wife prepared for our walk. We hastened to unload the boat, and to place the cargo safely under shelter along with our other stores.

The pinnace was anchored on the shore, and fastened with a rope by her head to a stake. When all our stores were thus disposed of, we began our journey to Falcon's Stream, but not empty-handed; we took with us every thing that seemed to be wanted for comfort; and when brought together, it was really so much that both ourselves and our beasts of burden had no easy task to carry them.

CHAPTER XXI.

Gymnastic Exercises; various Discoveries; singular Animals, &c.

I ADVISED my sons to resume the exercise of the shooting of arrows; for I had an extreme anxiety about their preserving and increasing their bodily strength and agility. Nothing sooner kills personal courage in a human being than the consciousness of wanting that strength of limb or that address which may be necessary to aid us in defending ourselves, or in escaping from dangers. On this occasion I added the exercises of running, jumping, getting up trees, both by means of climbing by the trunk, or by a rope, as sailors are obliged to do to get to the mast-head. We began at first by making knots in the rope, at a foot distance from each other; then we reduced the number of knots, and before we left off we contrived to succeed without any. I next taught them an exercise of a different nature, which was to be done with two balls

made of lead, fastened one to each end of a string about six feet in length. While I was preparing this, all eyes were fixed upon me. "What can it be intended for?" cried one: "How can we use it?" asked another: "Will it soon be ready?" continued a third.

"I am trying," said I, "to imitate the arms used by a great nation, remarkable for their skill in the chase, and whom you all must have heard of: I mean the Patagonians, inhabitants of the most southern point of America; but, instead of balls, which they are not able to procure, they tie two heavy stones, one at each end of a cord, but considerably longer than the one I am working with: every Patagonian is armed with this simple instrument, which they use with great dexterity. If they desire to kill or wound an enemy, or an animal, they fling one of the ends of this cord at him, and begin instantly to draw it back by the other, which they keep carefully in their hand, to be ready for another throw if necessary: but if they wish to take an animal alive, and without hurting it, they possess the singular art of throwing it in such a way as to make it run several times round the neck of the prey occasioning a perplexing tightness; they then

throw the second stone, and with so certain an aim that they scarcely ever miss their object: the operation of the second is, the so twisting itself about the animal as to stop his progress, even though he were at a full gallop. The stones continue turning, carrying with them the cord; the poor animal is at length so tangled that he can neither advance nor retire, and thus falls a prey to the enemy."

This description was heard with much interest by the boys, who now all entreated I would that instant try the effect of my own instrument upon a small trunk of a tree which we saw at a certain distance. My throws entirely succeeded; and the string with the balls at the end so completely surrounded the tree, that the skill of the Patagonian huntsmen wanted no further illustration. Each of the boys must then needs have a similar instrument; and in a short time Fritz became quite expert in the art, as indeed he was in every kind of exercise that required strength or address: he was not only the most alert of my children, but, being the eldest, his muscles were more formed, and his intelligence much greater, than could yet be expected in the other three.

The next morning as I was dressing, I remarked from my window in the tree that the sea was violent, and the waves swelled with the wind. I rejoiced to find myself in safety in my home, and that the day had not been destined for out-door occupation. I observed then to my wife that I should not leave her during the whole day, and therefore was ready to execute any thing she found wanting at home. We now fell to a more minute examination than I had hitherto had time for, of all our various possessions at Falcon's Stream. She showed me many things she had herself found means to add to them during my absences from home: among these was a pair of young pigeons which had been lately hatched, and were already beginning to try their wings, while their mother was again sitting on her eggs. From these we passed to the fruit trees we had laid in earth to be planted, and which were in real need of our assistance. I immediately set myself to prevent so important an injury. I had promised the boys, the evening before, to go all together to the wood of gourds, to provide ourselves with vessels of different sizes to keep our provisions in: they were delighted with the idea,

but I bargained that they must first assist me to plant all the young trees; which was no sooner said than set about.

When we had finished, the evening was too far advanced for so long a walk. By sunrise the next morning all were on foot. The ass, harnessed to the sledge, played the principal character: his office was to carry our dinners, a bottle of Canary wine, and some powder and shot, and to bring home our empty gourds. Turk, according to custom, led the way: next followed the three eldest boys, ready for sporting: after them the tender mother, leading the little one: and Flora brought up the rear, with the monkey on her back, to which the boys had given the name of Knips. On this occasion I took with me a double-barrelled gun, loaded on the one side with shot for game, and on the other with ball, in case of meeting with an enemy.

In this manner we set out, full of good-humour and high spirits, from Falcon's Stream. Turning round Flamingo Marsh, we soon reached the pleasant spot which before had so delighted us. Fritz took a direction a little farther from the seashore; and sending Turk into the tall grass he followed himself, and

both disappeared. Soon, eager for sport, we heard Turk barking loud; a large bird sprang up, and almost at the same moment a shot from Fritz brought it down: but though wounded, it was not killed; it raised itself, and got off with incredible swiftness, not by flying, but by running. Turk followed, and seizing the bird, held it fast till Fritz came up Now a different scene succeeded from that which took place at the capture of the fla mingo. The legs of that bird are long and weak, and it was able to make but a poor resistance. The present captive was large in size, and strong; it struck the dogs, or whoever came near, with its legs, with so much force, that Fritz, who had received a blow or two, dared not again approach the enemy. Fortunately, I reached the spot in time to give assistance, and was pleased to see that it was a female bustard of the largest size. I had long wished to possess and to tame a bird of this species for our poultry-yard, though I foresaw that it would be somewhat difficult.

To secure the bird without injuring it, I threw my pocket handkerchief over the head of the bustard; it could not disengage itself,

and its efforts only served to entangle it the more. As it could not now see me, I got near enough to pass a string with a running knot over its legs, which, for the present, I drew tight, to prevent further mischief from such powerful weapons. I gently released its wing from Turk's mouth, and tied it, with its fellow, close to the bird's body. In short, the bustard was our own!

We removed the prisoner to the spot where our companions had been waiting our return. Ernest and Jack ran briskly forward, bawling out, "Oh, what a handsome bird! And what a size! What beautiful feathers!"—"I think it is a female bustard," said Ernest. "And you are right," answered I; "its flesh is excellent, having somewhat of the flavour of the turkey, to which it also in some other respects has a resemblance. Let us endeavour to tame and preserve it by all means. We have gained for our poultry-yard a bird of rare value on account of its size, which will, it may be hoped, attract its mate, and thus furnish us with a brood of its species."

I now fixed the bustard on the sledge, in a posture the most favourable to its ease. As we advanced on our way, I was frequently

obliged to make a free passage for the ass in the tall grass. The heat also increased, and we were all complaining of thirst, when Ernest made a discovery of a most agreeable nature. He has already been described as a lover of natural history, and now he had gathered, as he proceeded, such plants as he met with, with the view of adding to his stock of knowledge. He found a kind of hollow stalk of some height, which grew at the root of trees, and entangled our feet in walking. He cut one of them, and was surprised to see a drop of pure fresh water issue at the place where the knife had been applied: he showed it to us, put it to his lips, and found it pure, and felt much regret that there was no more. I then fell to examining the stalk myself, and soon perceived that the want of air prevented a more considerable issue of water. I cut it again, and presently water flowed out as if from a small pipe. Ernest, and after him the other boys, quenched their thirst at this new fountain. I tried the experiment of dividing the plants lengthwise, and they soon gave out water enough to supply even the ass, the monkey, and the bustard. For my own part, touched with deep

gratitude for the goodness of God towards me and my beloved family, I raised my eyes to Heaven in thankfulness.

We were still compelled to fight our way through thick bushes, till at length, arrived at the wood of gourds, we were not long in finding the spot where Fritz and I had once before enjoyed so agreeable a repose.

Jack and Ernest employed themselves in collecting dried branches and flints, while their mother attended to the poor bustard. She remarked to me, that it was cruel to keep her any longer blinded, and her legs tied together on the sledge. To please her, I took off the covering, and loosened the string on the legs, but still left it so as to be a guard against its running away, or inflicting blows on those who might approach. I tied her by a long string to the trunk of a tree, that she might relieve herself by walking about.

My wife now gave us notice that she should want some vessels to contain milk, a large flat spoon to cut out butter by pieces, and next, some plates for serving it at table, made from the gourd rinds.

Father. You are perfectly reasonable in your demand, dear wife; and, on my part, I

require some nests for the pigeons, some baskets for eggs, and some hives for bees.

All. Oh yes, these things must all be made, we will set earnestly to work.

Jack. But first, father, tell us how to divide one of the rinds with a string.

I made them gather till we were in possession of a sufficient number. We now began our work: some had to cut; others to saw, scoop out, and model into agreeable forms. It was a real pleasure to witness the activity exhibited: each tried what specimens he could present for the applause of his companions. For my own part, I made a basket, large enough to carry eggs, with one of the gourds, leaving an arch at the top to serve as a cover. I likewise made a number of vessels, also with covers, fit to hold our milk, and then some spoons to skim the cream. My next attempt was some bottles large enough to hold fresh water, and these gave me more trouble than all the rest. It was necessary to empty the gourd through the small opening of the size of one's finger, which I had cut in it; I was obliged, after loosening the contents with a stick, to get them out with shot and

water well shaken on the inside. Lastly, to please my wife, I undertook the labour of a set of plates for her use. Fritz and Jack engaged to make the hives for the bees and nests for the pigeons and hens. For this last object, they took the largest gourds, and cut a hole in front, the size of the animal for whose use it was intended: they had, when finished, so pretty an appearance, that little Francis was ready to cry that he was not quite small enough to get into and live in one of them. The pigeons' nests were intended to be tied to the branches of our tree; those for the hens, the geese, and the ducks were to be placed between its roots, or on the sea-shore, and to make a sort of hen-coop.

Our work, added to the heat of the day, had made us all thirsty; but we found nothing on this spot like our *fountain* plants, as we had named them. The boys begged me to go with them in different directions, and try to find some water, not daring by themselves to venture farther into the wood.

Ernest with great eagerness proposed relieving me of this trouble, and putting himself in my place. It was not long before we

had time to employ ourselves in some trifling arrangements before it was completely dark. My wife had great pleasure in taking out her plate, and using some of them that evening; also the handsome egg-basket, and the vessels for the milk. Fritz was instructed to dig a place in the ground to serve for a kind of cooler, the better to preserve the milk; and we covered it with boards, and put heavy stones to keep them down. Jack took the pigeons' nests, and climbed up the tree, where he nailed them to the branches; he next laid some dry moss within, and placed one of the female pigeons we had contrived to tame, and which at the time was brooding, upon it; he put the eggs carefully under the mother, who seemed to accept his services, and to coo in return with gratitude.

We concluded the exertions of the day with a plain repast, and the fixing a comfortable bed for the bustard by the side of the flamingo, and then stretched our weary limbs upon the homely couch, in the giant tree.

CHAPTER XXII.

Travels into Unknown Parts.

My first thought the next morning was to fetch the sledge from the wood. I had a double motive for leaving it there, which I had refrained from explaining to my wife to avoid giving her uneasiness. I had formed a wish to go a little farther into the land, and ascertain whether any thing useful would present itself beyond the wall of rocks. I was, besides, desirous to be better acquainted with the extent, the form, and general productions of our island: I wished Fritz only, who was stronger and more courageous than his brothers, and Turk, to accompany me. We set out very early in the morning, and drove the ass before us for the purpose of drawing home the sledge.

As we were picking up some acorns, different birds flew about us; for this once I could not refuse Fritz the pleasure of firing upon them, that we might learn their species. He brought down three. I recognised one to be

the great blue Virginia jay, and the other two were parrots. One of the two was a superb red parrot; the other was green and yellow.

While Fritz was reloading his gun, we heard a singular sort of noise, which came from a distance. At one moment it resembled a muffled drum; at another, the noise made in sharpening a saw. My first idea was of music played by savages, and we retreated quickly, to hide ourselves among the bushes to listen. By degrees we advanced towards the place from whence the sound appeared to come; but perceiving nothing to alarm us, we separated some of the branches with our hands, and then discovered a handsome bird, about the size of the English cock; and, like it too, adorned with smooth feathers round the neck, and a comb upon his head. The animal stood erect on a trunk of a tree, which was lying on the ground, and at this moment exhibited some singular motions. His tail was spread in the form of a fan, similar to that of the turkey-cock, but shorter; the feathers round his neck and head were erect and bristling. He sometimes moved them so quick, as to make them appear like a vapour which suddenly enclosed him; sometimes h

whirled himself round and round on the trunk of the tree; at others he moved his head and eyes in such a manner as to express a state of wildness, making, at the same time, the singular kind of noise with his voice which had alarmed us, and which was preceded and followed by a sort of explosion. This last was caused by the motion of his wing striking in a quick measure on the trunk, which was hollow and dry, and made the noise resemble a muffled drum. There were assembled around him a great number of birds of the same species, but much smaller, and of a less beautiful form. One and all fixed their eyes upon him, and seemed delighted. I contemplated this strange sight, of which I had formerly read an account, with surprise. The number of other birds increased every moment, and the performance increased in spirit also, presenting the idea of a perfect madness of the creature. At this moment Fritz, who stood a little behind me, put an end to the scene, by firing off his gun. The actor fell from the stage, and stretching himself on the sand, breathed his last, and the birds betook themselves suddenly to flight. I must confess, the interest I took in the exhibition was of so

Fritz. You mentioned just now, that in each class of the animal creation there were some individuals which formed themselves into societies: pray tell me which they are?

Father. I know of no instance among birds, but that we have just been witnessing; but among quadrupeds, there is at least one striking example of the social principle: try to recollect it yourself.

Fritz. It is perhaps the elephant or the sea-otter?

Father. Neither is the one I thought of: the animals you have named discover also a strong disposition to live in society with their species, but they build nothing like a common house of reception: try again.

Fritz. Ah, is it not the beaver, father?

Father. You are quite right; and, strictly speaking, the marmoset also may be included in the number of sociable quadrupeds; for they dig themselves a common place of abode, a sort of cavern, in the mountains; and in these whole families of them pass the winter in a continual sleep.

We reached a wood, the trees of which in a small degree resembled the wild fig-tree; at least the fruit they bore, like the fig, was round

in form, and contained a soft juicy substance full of small grains. Their height was from forty to sixty feet: the bark of the trunk was scaly, like the pineapple, and wholly bare of branches, except at the very top. The leaves of these trees are very thick; in substance tough, like leather; and their upper and under surfaces are different in colour. But what surprised us the most, was a kind of gum, which ran in a liquid state from the trunk of the tree, and became immediately hardened by the air. This discovery awakened Fritz's attention: in Europe he had often made use of the gum produced by cherry-trees, either as a cement or varnish; and the thought struck him that he could do the same with what he now saw.

As we walked, he looked frequently at his gum, which he tried to soften with his breath, but without success: he now discovered a still more singular property in the substance, that of stretching on being pulled at the extremities; and, on letting go, of reducing itself instantly, by the power of an elastic principle. He was struck with surprise, and sprang towards me, repeating the experiment before my eyes, and exclaiming, "Look, father! if this is not the very thing we for-

merly used to rub out bad strokes in our drawings."

"Ah! what do you tell me?" cried I with joy: "such a discovery would be valuable indeed. The best thanks of all will be due to you, if it is the true *caoutchouc* tree, which yields the Indian-rubber. Quick, hand it here, that I may examine it." Having satisfied myself of our good fortune, I had now to explain, that caoutchouc is a kind of milky sap, which runs from its tree, in consequence of cuttings made in the bark. "This liquor is received in vessels placed expressly for the purpose: it is afterward made to take the form of dark-coloured bottles of different sizes such as we have seen them, in the following manner. Before the liquor has time to harden, some small earthen bottles are dipped into it a sufficient number of times to form the thickness required. These vessels are then hung over smoke, which completely dries them, and gives them a dark colour. Before they are entirely dry, a knife is drawn across them, which produces the lines or figures with which you have seen them marked. The concluding part of the operation is to break the mould, and to get out the pieces by the passage of

the neck, when there remains the complete form of a bottle.

Fritz. This process seems simple enough, and we will make some bottles of it for carrying liquids, when we go far in pursuit of game. But still I do not perceive how the discovery is of so much value to us.

Father. Not by this use of it alone, certainly; but its quality is excellent for being made into shoes and boots without seams, if we can get earthen moulds of the size of the leg or foot to be fitted. We must consider of some means of restoring masses of the caoutchouc to its liquid form, for spreading upon the moulds; and if we should not succeed, we must endeavour to draw it in sufficient quantities in its liquid state from the trees themselves.

We continued our way till we reached another wood, the skirts of which we had already seen. In this spot alone, and mixed with a quantity of cocoa-trees, I discovered a sort of tree of smaller growth, which I presumed must be the sago-palm: one of these had been thrown down by the wind, so that I was able to examine it thoroughly. I perceived that the trunk of it contained a large quantity

of a mealy substance; I therefore, with my hatchet, laid it open lengthwise and cleared it of the whole contents; and I found on tasting it was exactly like the sago I had often eaten in Europe. We now began to consider how much farther we would go: the thick bushes of bamboo, through which it was impossible to pass, seemed to furnish a stopping-place to our journey. We were therefore unable to ascertain whether or not we should have found a passage beyond the wall of rocks: we perceived then no better resource than to turn to the left towards Cape Disappointment, where the plantations of sugar-canes now again drew our attention. That we might not return empty-handed to Falcon's Stream, and might deserve forgiveness for so long an absence, we each took the pains to cut a large bundle of the canes, which we threw across the ass's back. We soon arrived on the well known shore of the sea, which at length afforded an open and a shorter path; we next reached the wood of gourds, where we found our sledge loaded as we had left it the night before; we took the sugar-canes from the ass, and fastened them to the sledge,

and then we harnessed the ass, and the animal began to draw towards home.

We arrived at Falcon's Stream without any further adventure. We received at first some kind reproofs: we were next questioned, and lastly thanked, as we showed our various treasures, but particularly the sugar-canes: each of the boys seized one, and began to suck it, as did their mother also. Nothing could be more amusing than to hear Fritz relate our new discoveries, and to see him imitate the gestures of the heath-cock, as he held it up for examination: his hearers continued to shout with laughter for many minutes. Then came the history of the colony of birds and their singular habitation, and of the green parrot, all of which was listened to with the delight excited by a fairy tale. Fritz showed them the handsome red parrot dead, also the great blue jay, both of which they did not cease to admire; but when he took out of his pocket the little green parrot all alive, there were no bounds to their joy; they jumped about like mad things, and I was obliged to use my authority to prevent their tearing him to pieces, in the struggle who should have him first. Francis nearly devoured the little

animal with kisses, repeating a thousand times "Pretty little parrot!" At length the bird was fastened by the leg to one of the roots of the trees, till a cage could be made for him; and was fed with acorns, which he appeared exceedingly to relish. We next gave an account of the prospect I now had of furnishing, not only candles, but boots and shoes. Fritz took a bit of the rubber from his pocket, and drew it to its full length, and then let it go suddenly, to the great amusement of little Francis.

Soon after night-fall, we ate a hearty meal: being much fatigued, we went earlier than usual to rest, and having carefully drawn up the ladder, we fell into sound and peaceful slumbers.

CHAPTER XXIII.

Useful Occupations and Labours—Embellishments—A painful but natural Sentiment.

On the following day, my wife and the boys begged me to begin my manufactory of candles: I therefore set myself to recollect all I had read on the subject. I soon saw that I should be at a loss for a little fat to mix with the wax I had got from the berries, for making the light burn clear: but I was compelled to proceed without. I put as many berries into a vessel as it would contain, and set it on a moderate fire; my wife in the mean time employed herself in making some wicks with the threads of sail-cloth. When we saw an oily matter, of a pleasing smell and light green colour, rise to the top of the liquid the berries had yielded, we carefully skimmed it off and put it into a separate vessel, taking care to keep it warm. We continued this process till the berries were exhausted, and had produced a considerable quantity of wax; we next dipped the wicks one by one into it, while it remained liquid, and then hung them

on the bushes to harden: in a short time we dipped them again, and repeated the operation till the candles were increased to the proper size, and they were then put in a place and kept till sufficiently hardened for use. We however were all eager to judge of our success that very evening, by burning one of the candles, with which we were well satisfied. In consequence of this new treasure, we should now be able to sit up later, and consequently spend less of our time in sleep; but independently of this advantage, the mere sight of a candle, which for so long a time we had been deprived of, caused joy to all.

Our success in this last enterprise encouraged us to think of another, the idea of which had long been cherished by my wife. It was to make fresh butter of the cream we every day skimmed from the milk, and which was frequently spoiled, and given to the animals. The utensil we stood in need of was a churn, to turn the cream in. Having earnestly applied my thoughts, as to the best manner of conquering the difficulty, I suddenly recollected what I had read in a book of travels, of the method used by the Hottentots for making butter; but instead of

a sheep-skin sewed together, I emptied a large gourd, washed it clean, filled it again with cream, and stopped it close with the piece I had cut from the top. I placed my gourd of cream on a piece of sail-cloth with four corners, and tied to each corner a stake: I placed one boy midway between each stake, and directed them to shake the cloth briskly, but with a steady measure, for a certain time. This exercise, which seemed like children's play, pleased them mightily, and they called it rocking the cradle. They performed their office singing and laughing all the time, and in an hour, on taking off the cover, we had the satisfaction of seeing some excellent butter. We heartily congratulated each other, and praised the workmen, who by their constancy of labour had thus produced a most agreeable article for food. I had now to propose to my sons a work of a more difficult nature than we had hitherto accomplished: it was the making a cart, in all its forms, for the better carrying of our effects from place to place, instead of the sledge, which caused us so much fatigue to load and draw. Many reasons induced me to confine my attempt in the first instance to a two-wheel cart, and to observe the result

before I ventured on one with four wheels. I tried earnestly and long to accomplish such a machine; but it did not entirely succeed to my wishes, and I wasted in the attempt both time and timber; I however produced what we called a cart, and it answered the purpose for which it was made.

When I had no occasion for the boys, they with their mother engaged in other useful matters. They undertook to transplant the European fruit-trees, to place them where they would be in a better situation for growth, according to the properties of each. They planted vine-shoots round the roots of the magnificent tree we inhabited, and round the trunks of some other kinds of trees which grew near. Lastly, we planted two parallel lines of saplings, consisting of chestnut, cherry, and the common nut-trees, to form a walk from Family Bridge to Falcon's Stream. This last undertaking was not to be effected without a degree of labour and fatigue: the ground was to be cleared of every thing it had produced, and a certain breadth covered with sand, left higher in the middle than on the sides for the sake of being always dry. The boys fetched the sand from the sea-side in their wheelbarrows.

Our next concern was to introduce, if possible, some shade and other improvements on the barren site of Tent House, and to render our occasional abode there more secure. We began by planting all those sorts of trees that thrive best in the sun, such as lemon, pistachio, almond, mulberry, and lime-trees; lastly, some of a kind of orange-tree which attains to a great size, and bears a fruit as large as the head of a child. The commoner sorts of nut-trees we placed along the shore. The better to conceal and fortify our tent, which enclosed all our stores, we formed on the accessible side a hedge of wild orange and lemon-trees, which produce prickly leaves; and to add to the agreeableness of their appearance, we here and there fixed the pomegranate; nor did I omit to make a little arbour of the guava shrub, which is easily raised from slips, and bears a small fruit rather pleasant to the taste. We also took care to introduce at proper places a certain number of the largest sorts of trees, which in time would serve the double purpose of shading annual plants, and, with benches placed under them, a kind of private room. Should any accident or alarm compel us to retire to the fortress of Tent House, a

thing of the first importance would be to find there sufficient food for our cattle. For the greater security, I formed a plantation of the thorny fig-tree, of sufficient breadth to occupy the space between our fortress and the river, thus rendering it difficult for an enemy to approach.

The curving form of the river having left some elevations of the soil within the enclosure, I found means to work them into slopes and angles, so as to serve as bastions to our two cannon from the pinnace and our other firearms, should we ever be attacked by savages. When this was all complete, we perceived that one thing more was wanting, which was to make such alterations in Family Bridge as would enable us to use it as a drawbridge, or to take it away entirely, this being the only point at which the passage of the river could be easily effected. But as we could not do all at once, we contented ourselves, for present safety, with taking away the first planks of the bridge at each end every time we passed it. My concluding labour was to plant some cedars along the usual landing places, to which we might fasten our vessels.

We employed six whole weeks in effecting

these arrangements; but the exercise of mind and body they imposed contributed to the physical and moral health of the boys, and to the support of cheerfulness in ourselves. The constant and strict observance of the Sabbath-day afforded such an interval of rest as could not fail to restore our strength, and inspire us with the desire of new exertions. The sentiment of gratitude which filled our minds towards the Supreme Being, who had saved us from destruction, and supplied us with all things needful, demanded utterance, and on Sundays we might allow ourselves the indulgence of pouring out our hearts in thankfulness.

By this time we had nearly exhausted our stock of clothes, and we were compelled once more to have recourse to the vessel, which we knew still contained some chests fit for our use. To this motive we added an earnest desire to take another look at her, and, if practicable, to bring away a few pieces of cannon, which might be fixed on the new bastions at Tent House, and thus we should be prepared for the worst.

The first fine day I assembled my three eldest sons, and put my design into execution.

We reached the wreck without any striking adventure, and found her still fixed between the rocks, but somewhat more shattered than when we had last seen her. We secured the chests of clothes, and whatever remained of ammunition stores; powder, shot, and even such pieces of cannon as we could remove, while those that were too heavy we stripped of their wheels, which might be extremely useful.

But to effect our purpose, it was necessary to spend several days in visits to the vessel, returning constantly in the evening, enriched with every thing of a portable nature which the wreck contained; doors, windows, locks, bolts, nothing escaped our grasp: so that the ship was now entirely emptied, with the exception of the large cannon, and three or four immense copper kettles. We by degrees contrived to tie the heaviest articles to two or three empty casks well pitched, which would thus be sustained above water. I supposed that the wind and tide would convey the beams and timbers ashore, and thus with little pains we should be possessed of a sufficient quantity of materials for erecting a building at some future time. When these measures

were taken, I came to the resolution of blowing up the wreck, by a process similar to that with which I had so well succeeded with the pinnace. We accordingly prepared a cask of gunpowder, which we left on board for the purpose: we rolled it to the place most favourable for our views: we made a small opening in its side, and at the moment of quitting the vessel, we inserted a piece of matchwood, which we lighted at the last moment, as before. We then sailed with all possible expedition for Safety Bay, where we arrived in a short time. We could not, however, withdraw our thoughts from the wreck, and from the expected explosion, for a single moment. I had cut the match a sufficient length for us to hope that she would not go to pieces before dark. I proposed to my wife to have our supper carried to a little point of land from whence we had a view of her, and here we waited for the moment of her destruction with lively impatience.

About the time of nightfall, a rolling sound like thunder, accompanied by a column of fire and smoke, announced that the ship which had brought us to our present abode in a desert, and furnished us there with such vast

supplies for general comfort, was that instant destroyed, and withdrawn for ever from the face of man!—At this moment, love for the country that gave us birth, that most powerful sentiment of the human heart, sank with a new force into ours. The ship had disappeared for ever! Could we then form a hope ever to behold that country more? We had made a sort of jubilee of witnessing the spectacle: the boys had clapped their hands and skipped about in joyful expectation; but the noise was heard; the smoke and sparks were seen!—while the sudden change which took place in our minds could be compared only to the rapidity of these effects of our concerted scheme against the vessel. We all observed a mournful silence, and all rose, and with our heads sinking on our bosoms, and our eyes cast upon the ground, we took the road to Tent House.

My wife was the only person who was sensible of motives for consolation in the distressing scene which had been passing; she was now relieved from all the cruel fears for our safety in our visits to a shattered wreck, that was liable to fall to pieces during the time we were on board. From this mo-

ment she conceived a stronger partiality for our island, and the modes of life we had adopted.

A night's repose had in some measure relieved the melancholy of the preceding evening, and I went rather early in the morning with the boys to make further observations as to the effects of this event. We saw in the water and along the shore abundant marks of the departed wreck; and among the rest, at a certain distance, the empty casks, kettles, and cannon, all tied together, and floating in a large mass upon the water. We jumped instantly into the pinnace, with the tub-boat fastened to it, and made a way towards them through the numberless pieces of timber, &c. that intervened, and in a little time reached the object of our search, which from its great weight moved slowly upon the waves. Fritz, with his accustomed readiness, flung some rope round two four-pounders, and contrived to fasten them to our barge; after which he secured also an enormous quantity of poles, laths, and other useful articles. With this rich booty we returned to land.

We performed three more trips for the purpose of bringing away more cannon, kettles,

fragments of masts, &c., all of which we deposited for present convenience in Safety Bay: and now began our most fatiguing operations, —the removing such numerous and heavy stores from the boats to Tent House. We separated the cannon and the kettles from the tub-raft and from each other, and left them in a place which was accessible for the sledge and the beasts of burden. With the help of the crow we succeeded in getting the kettles upon the sledge, and in replacing the four wheels we had before taken from the cannon; and now found it easy to make the cow and the ass draw them.

The largest of the copper kettles we found of the most essential use. We brought out all our barrels of gunpowder, and placed them on their ends in three separate groups, at a short distance from our tent; we dug a little ditch round the whole to draw off the moisture from the ground, and then put one of the kettles turned upside-down upon each, which completely answered the purpose of an outhouse. The cannon were covered with sailcloth, and upon this we laid heavy branches of trees; the larger casks of gunpowder we prudently removed under a projecting piece of

rock, and covered them with planks, till we should have leisure for executing the plan of an ammunition storehouse, about which we had all become extremely earnest.

My wife, in taking a survey of these our labours, made the agreeable discovery that two of our ducks and one of the geese, had been brooding under a large bush, and at the time were conducting their little families to the water. The news produced general rejoicings; and the sight of the little creatures so forcibly carried our thoughts to Falcon's Stream, that we all conceived the ardent desire of returning to the society of the numerous old friends we had left there. One sighed for his monkey, another for his flamingo; Francis for his parrot, and his mother for her poultry-yard, her various housewifery accommodations, and her comfortable bed. We therefore fixed the next day for our departure, and set about the necessary preparations.

CHAPTER XXIV.

A new Territory—The Troop of Buffaloes—The Vanquished Hero.

On entering our plantation of fruit-trees forming the walk to Falcon's Stream, we observed that they had not a vigorous appearance, and that they inclined to curve a little in the stalk; we therefore resolved to support them with sticks, and I proposed to walk to the vicinity of Cape Disappointment for the purpose of cutting some bamboos. I had no sooner pronounced the words, than the three eldest boys and their mother exclaimed, at once, that they would accompany me. Their curiosity had been excited by our accounts of the amusing objects we had met with in our visit to the spot: each found a sound and special reason why he must not fail to be of the party. Our provision of candles was nearly exhausted, and a new stock of berries must therefore be procured, for my wife now repaired our clothes by candle-light, while I

employed myself in composing a journal of the events of every day: then, the sow had again deserted us, and nothing could be so probable as that we should find her in the acorn-wood: Jack would gather some guavas for himself; and Francis must needs see the plantation of sugar-canes. In short, all would visit this land of Canaan.

We accordingly fixed the following morning, and set out in full procession. For myself, I had a great desire to explore more thoroughly this part of our island. I therefore made some preparations for sleeping, should we find the day too short for all we might have to accomplish: I took the cart instead of the sledge, having fixed some planks across it for Francis and his mother to sit upon when they should be tired: I was careful to be provided with the different things we might want; some rope machinery I had contrived for rendering the climbing of trees more easy; and lastly, some provisions, some water in a gourd-flask, and one bottle of wine from the captain's store. When all was placed in the cart, I for this time harnessed to it both the ass and the cow, as I expected the load would be increased on our return: and we set out,

taking the road of the potato and manioc plantations. Our first halt was at the tree of the colony of birds, which I now examined with more attention, and recollected to what species they belonged, by naturalists named *Loxia Gregaria* (sociable grossbeak).

It was not without much difficulty that we conducted the cart through the thick bushes, the most intricate of which I everywhere cut down, and we helped to push it along with all our strength. We succeeded tolerably well at last; and that the poor animals might have time to rest, we determined to pass several hours in this place, which furnished such a variety of agreeable and useful objects. We began by gathering a bagful of the guavas; and after eating plentifully, we put the remainder into the cart.

We continued our way, and soon arrived at the caoutchouc, or gum-elastic trees. I thought we could not do better than to halt here, and endeavour to collect a sufficient quantity of the sap to make the different utensils and the impenetrable boots and shoes, as I had before proposed. It was with this design that I had taken care to bring with me several of the most capacious of the gourd rinds. I made

deep incisions in the trunks, and fixed some large leaves of trees, partly doubled together lengthwise, to the place, to serve as a sort of channel to conduct the sap to the vessels I had kept in readiness to receive it. We had not long begun this process before we perceived the sap begin to run out as white as milk, and in large drops, so that we were not without hopes, by the time of our return, to find the vessels full, and thus to have obtained a sufficient quantity of the ingredient for a first experiment.

We left the sap running, and pursued our way, which led us to the wood of cocoa-trees; from thence we passed to the left, and stopped half-way between the bamboos and the sugar-canes, intending to furnish ourselves with a provision of each. We aimed our course so judiciously, that on clearing the skirts of the wood we found ourselves in an open plain, with the sugar-cane plantations on our left, and on our right those of bamboo mixed with various kinds of palm-trees, and, in front, the magnificent bay formed by Cape Disappointment, which stretched far out into the sea.

The prospect that now presented itself to

our view was of such beauty, that we determined to choose it for our resting-place, and to make it the central point of every excursion we should in future make; we were even more than half-disposed to desert our pretty Falcon's Stream, and transport our possessions hither; a moment's reflection, however, betrayed the folly of quitting the thousand comforts we had there with almost incredible industry assembled. We disengaged the animals, that they might graze and refresh themselves under the shade of the palm-trees, and sat down to enjoy our own repast, and to converse on the beauty of the scene.

It was now evening; and as we had determined to pass the night in this spot, we began to think of forming some large branches of trees into a sort of hut, as is practised by the hunters in America, to shelter us from the dew and the coolness of the air. While we were thus engaged we were suddenly roused by the loud braying of the ass, which we had left to graze at a distance but a short time before. On going to the place, we saw him throwing his head in the air, and kicking and prancing about; and while we were thinking what could be the matter, he set off on a full

gallop. Unfortunately Turk and Flora, whom we sent after him, took the fancy of entering the plantation of the sugar-canes, while the ass had preferred the direction of the bamboos on the right. We began to fear the approach of some wild beast might have frightened the creature, and to think of getting our firearms. In a little time the dogs returned, and showed no signs, by scenting the ground or otherwise, of any pursuit. I made a turn round the hut to see that all was well, and then sallied forth with Fritz and the two dogs in the direction the ass had taken, hoping the dogs might be enabled to trace him by the scent.

Fatigued, and vexed with the loss of the useful creature, I entered the hut, which I found complete, the boys having covered it with sail-cloth, and strewed branches on the ground for sleeping, and collected some reeds for making a fire, which the freshness of the evening air rendered agreeable to all; it served us also for cooking our supper. When all was safe, I watched and replenished the fire till midnight, rather from habit than the fear of wild beasts, and then took possession of the little corner assigned me near my slumbering companions.

The following morning we breakfasted on some milk from the cow, some boiled potatoes, and a small portion of Dutch cheese, and formed during our meal the plan of the business for the day. It was decided that one of the boys and myself, attended by the two dogs, should seek the ass through the bamboo plantation. I took with me Jack, who was almost beside himself with joy at this determination.

We soon reached the bamboo plantation, and found means to force ourselves along its intricate entanglements. After great fatigue, we discovered the print of the ass's hoofs on the ground, which inspired us with new ardour in the pursuit. After spending a whole hour in further endeavours, we at length, on reaching the skirts of the plantation, saw the sea in the distance, and soon after found ourselves in an open space, which bounded the great bay. A considerable river flowed into the bay at this place, and we perceived that the ridge of rocks, which we had constantly seen, extended to the shore, and terminated in a perpendicular precipice, leaving only a narrow passage between the rocks and the river, which during every flow of the tide must necessarily be under water, but which at that

moment was dry and passable. The probability that the ass would prefer passing by this narrow way to the hazard of the water, determined us to follow in the same path: we had also some curiosity to ascertain what might be found on the other side of the rocks, for as yet we were ignorant whether they formed a boundary to our island or divided it into two portions; whether we should see there land or water. We continued to advance, and at length reached a stream which issued foaming from a large mass of rock, and tumbled in a fall into the river. The bed of this stream was so deep, and its course so rapid, that we were a long time finding a part where it might be most easy for us to cross. When we had got to the other side, we found the soil again sandy, and mixed with a fertile kind of earth: in this place we no longer saw naked rock; but the print of the ass's hoofs were again visible on the ground.

By observing closely, we saw with astonishment the prints of the feet of other animals, much larger and different in many respects from those of the ass. Our curiosity was so strongly excited, that we resolved to follow the traces; and they conducted us to a plain

at a great distance. We ascended a hill, and then, with the assistance of a glass, we beheld an extensive range of country exhibiting every kind of rural beauty, and in which a profound peace had seemed to take up its abode. To our right appeared the high wall of rocks which divided the island. Some of these appeared to touch the heavens, while mists, broken into pieces, partially concealed their tops. To the left, a chain of gently-rising hills, the long green verdure of which, tinged with blue, stretched as far as the eye could discern, and were interspersed at agreeable distances with little woods of palm-trees. The river we had crossed flowed through this exquisite valley, presenting the idea of a broad floating silver riband, while its banks were adorned with reeds and various plants. I could with difficulty take my eyes from this spectacle, and I seated myself on the ground to contemplate and enjoy it at my leisure. Neither on the plain nor on the hills was there the smallest trace of the abode of man, nor of any kind of cultivation; it was everywhere a virgin soil, in all its purity; nothing endowed with life appeared to view, excepting a few birds, which flew fearlessly around us, and a

quantity of brilliant butterflies, which the eye frequently confounded with the different sorts of unknown flowers which here and there diversified the surface of the soil.

By straining our eyes, however, as far as we could see, we thought we perceived at a great distance some specks upon the land that seemed to be in motion. We hastened towards the spot; and as we drew nearer, to our surprise beheld a numerous group of animals, which in the assemblage presented something like the outline of a troop of horses or of cows. I observed them sometimes run up to each other, and then suddenly stoop to graze. Though we had not lately met with further traces of the ass, I was not entirely without the hope of finding him among these animals. On a nearer approach, we perceived they were wild buffaloes. This animal is formed at first sight to inspire the beholder with terror; it is endowed with a great degree of strength, and two or three of them would have been capable of destroying us in a moment, should they attack us. My alarm was so great that I remained for a few moments fixed to the spot like a statue. By good luck the dogs were far behind us, and the buffaloes

gave no sign of fear or of displeasure at our approach: they stood perfectly still, with their large round eyes fixed upon us in vacant surprise: those which were lying down got up slowly, but not one among them seemed to have any hostile disposition towards us. The circumstance of the dogs' absence was most likely, on this occasion, the means of our safety; as it was, we had time to draw back quietly, and prepare our firearms. It was not, however, my intention to make use of them in any way but for defence, being sensible that we were unequal to the fight, and recollecting also to have read that the sound of a gun drives the buffalo to a state of desperation. I therefore thought only of retreating; and with my poor Jack, for whom I was more alarmed than for myself, was proceeding in this way, when unfortunately Turk and Flora ran up to us, and we could see were noticed by the buffaloes. The animals instantly and all together, set up such a roar as to make our nerves tremble; they struck their horns and their hoofs upon the ground, which they tore up by pieces and scattered in the air. I with horror foresaw the moment when they would seize upon and tear us to

pieces. Our brave Turk and Flora, fearless of danger, ran, in spite of all our efforts, into the midst of them, and, according to their manner of attacking, laid hold of the ears of a young buffalo, which happened to be standing a few paces nearer to us than the rest; and though the creature began a tremendous roar and motion with his hoofs, they held him fast, and were dragging him towards us. Thus hostilities had commenced; and unless we could resolve to abandon the cause of our valiant defenders, we were now forced upon the measure of open war, which, considering the strength and number of the enemy, wore a face of the most pressing danger. Our every hope seemed now to be in the chance of the terror the buffaloes would feel at the noise of our musketry, which perhaps would excite them to flight. With a fearful heart and trembling hands, we fired both at the same moment: the buffaloes, terrified by the sound and by the smoke, remained for an instant motionless, as if struck by a thunderbolt, and then one and all betook themselves to flight with such rapidity that they were soon beyond the reach of our sight. We heard their loud roaring from a considerable distance, which

by degrees subsided, and we were left with only one of their terrific species near us; this one, a female, was no doubt the mother of the young buffalo which the dogs had seized and still kept a prisoner; she had drawn near on hearing its cries, and had been wounded by our guns, but not killed: the creature was in a furious state; after a moment's pause, she took aim at the dogs, and with her head on the ground, as if to guide her by the scent, was advancing in her rage, and would have torn them to pieces, if I had not prevented her by firing upon her with my double-barrelled gun, and thus putting an end to her existence.

It was only now that we began to breathe. A few moments before, death, in the most horrible and inevitable form, seemed to stare us in the face! But now we might hope that every danger was over: I was delighted with the behaviour of my boy, who, instead of giving way to fears and lamentations, as other lads of his age might have done, had stood all the time in a firm posture by my side, and had fired with a steady aim in silence. I bestowed freely on him the praise he had so well deserved, and made him sensible how necessary

it is in times of danger to preserve a presence of mind, which in many cases is of itself sufficient to effect deliverance. The young buffalo still remained a prisoner, with his ears in the mouths of the dogs, and the pain occasioned him to be so furious that I was fearful he might do them some injury; I therefore determined to advance and give them what assistance I could. To say the truth, I scarcely knew in what way to do this. The buffalo, though young, was strong enough to revenge himself if I were to give the dogs a sign to let go his ears. I had the power of killing him with a pistol at a stroke; but I had a great desire to preserve him alive, and to tame him, that he might be a substitute for the ass, which we had but little hope of recovering. I found myself in a perplexing state, when Jack suddenly interposed a way for accomplishing my wishes. He had his string with balls in his pocket; he drew it out hastily, and making a few steps backward, he threw it so skilfully as to entangle the buffalo completely, and throw him down. As I could then approach him safely, I tied his legs two-and-two together with a very strong cord; the dogs released his ears, and from this mo-

ment we considered the buffalo as our own. Jack was almost mad with joy. "What a magnificent creature! How much better than the ass he will look, harnessed to the cart! How my mother and the boys will be surprised and stare at him as we draw near!" repeated he, many and many times.

The question was now, how we were to get the buffalo home: having reflected, I conceived that the best way would be to tie his two fore-legs together so tight that he could not run, yet loose enough for him to walk; "and," said I, "we will next adopt the method practised in Italy; you will think it somewhat cruel, but the success will be certain; and it shall afterward be our study to make him amends by the kindest care and treatment. Hold the cord which confines his legs with all your strength, that he may not be able to move: I then called Turk and Flora, and made each again take hold of the ears of the animal; I took from my pocket a sharp-pointed knife, and taking hold of the snout, I made a hole in the nostril, into which I quickly put the string, which I immediately tied so closely to a tree that the animal was prevented from the least motion of the head,

which might have inflamed the wound and increased his pain. I drew off the dogs the moment the operation was performed. The creature, thus rendered furious, would have run away, but the confinement of the legs and the pain in the nostril prevented it. The first attempt I made to pull the cord found him docile and ready to accommodate his motions to our designs, and I perceived that we might now begin our march. I left him for a short time to make some other preparations.

I was unwilling to leave so fine a prey as the dead buffalo behind us: I therefore, after considering what was to be done, began by cutting out the tongue, which I sprinkled with some of the salt we had in our provision-bag: I next took off the skin from the feet, taking care not to tear it in the operation. I remembered that the American Indians use these skins, which are of a soft quality, as boots and shoes, and I considered them as precious articles. I lastly cut some of the flesh of the animal with the skin on, and salted it, and abandoned the rest to the dogs, as a recompense for their behaviour. I then repaired to the river to wash myself, after which we sat

down under the shade of a large tree, and ate the rest of our provisions.

As we were not disposed to leave the spot in a hurry, I desired Jack to take the saw and cut down a small quantity of the reeds, which from their enormous size might be of use to us. We set to work, but I observed that he took pains to choose the smallest. "What shall we do," said I, "with these small-sized reeds? You are thinking, I presume, of a bagpipe, to announce a triumphal arrival to our companions?"

"You are mistaken, father," answered Jack; "I am thinking of some candlesticks for my mother, who will set so high a value on them!"

"This is a good thought," said I; "I am pleased both with the kindness and the readiness of your invention, and I will assist you to empty the reeds without breaking them: if we should not succeed, at least we know where to provide ourselves with more."

We had so many and such heavy articles to remove that I dismissed for that day all thoughts of looking farther for the ass. I began now to think of untying the young buffalo; and on approaching him perceived with pleasure that he was asleep, which af-

forded me a proof that his wound was not extremely painful. As I began to pull him gently with the string, he gave a start; but he afterward followed me without resistance. I fastened another string to his horns, and led him on by drawing both together; and he performed the journey with so unexpected a docility, that to ease ourselves of a part of our heavy burdens, we even ventured to fasten the bundles of reeds upon his back, and upon these we laid the salted pieces of the buffalo. The creature did not seem aware that he was carrying a load; he followed in our path, as before, and thus on the first day of our acquaintance he rendered us an essential service.

In a short time we found ourselves once more at the narrow passage between the torrent and the precipice of the rocks, which I have already mentioned. I had tied the young buffalo to a tree near the fall, without remarking of what kind it might be; when I went to release him, I saw that it was a kind of small palm-tree, and on looking about me, I also observed some other palm-trees, which I had not before met with. One of the kinds. I now remarked, was from ten to twelve feet in height; its leaves were armed with thorns,

and it bore a fruit resembling a small cucumber in form, but which at this time was not ripe, so that we could not taste it. The second, which was smaller, was also thorny; it was now in blossom, and had no fruit. I suspected that the first of these was the *little royal palm*, sometimes called *awiva*, or *Adam's needle;* and the other, the *dwarf palm.* I resolved to get some of both, for further fortifying my enclosure at Tent House, and also to protect the outer side of the narrow pass immediately over the torrent of the fall. I determined to return and plant a line of them there, as close to each other as the consideration of their growth would allow; for my intention, of course, was to effect this by means of the young shoots which presented themselves in great abundance: we also hoped by that time to find their fruit ripe, and to ascertain their kind.

We repassed the river in safety, and accompanied by the agreeable sounds of its foaming falls, we regained the narrow pass at the turn of the rocks. We proceeded with caution, and when safe on the other side, we thought of quickening our pace to arrive the sooner at the hut.

The first questions about health and safety being answered, we entered upon the story of our adventures; when question after question was so rapidly proposed to us, that we, on our parts, were obliged to ask for the necessary time for our replies. All agreed that our success with the buffalo was the greatest of our achievements; all longed for the morning, when they might take their fill of looking at the spirited creature we had brought with us. The day concluded with supper and sound repose.

CHAPTER XXV.

The Malabar Eagle—Sago Manufactory—Bees.

My wife the next morning began the conversation. She told me that the boys had been good and diligent; that they had ascended Cape Disappointment with her, and had gathered wood, and made some torches for the night; and, what seemed almost incredible, had ventured to cut down an immense

palm-tree. It lay on the ground, and covered a space of at least seventy feet in length. To effect their purpose, Fritz had got up the tree with a long rope, which he fastened tight to the top of it. As soon as he had come down again, he and Ernest worked with the axe and saw to cut it through. When it was nearly divided, they cautiously managed its fall with the rope, and in this manner they succeeded Fritz was in high spirits too on another account: he brought me on his wrist a young bird of prey, of the most beauteous feathers; he had taken it from the nest in one of the rocks near Cape Disappointment. Very young as the bird was, it had already all its feathers, though they had not yet received their full colouring; it answered to the description I had read of the beautiful eagle of Malabar: meeting with one of these birds is thought a lucky omen; and it being neither large nor expensive in its food, I was desirous to keep it and train it like a falcon, to pursue smaller birds. Fritz had already covered its eyes and tied a string to its foot; and I advised him to hold it often, and for a length of time, on his hand, and to tame it with hunger, as falconers do.

When all the narratives were ended, I ordered a fire to be lighted, for the purpose of raising a smoke, over which I meant to hang the buffalo-meat I had salted, to dry and preserve it for our future use. The young buffalo was beginning to browse, and we gave him also a little of the cow's milk; and in a few days we fed him with a heap of sliced potatoes, which he greedily ate; and this led us to conclude that the pains from the wound in his nose had subsided, and that he would soon become tame.

The morning of this day was spent in talking over our late adventures; we left our meat hung over the smoke of the fires during our sleep; we tied the young buffalo by the side of the cow, and were pleased to see them agree, and bid fair to live in peace. At night the dogs were set upon the watch. Fritz resolved to go to bed with his eagle fastened on his wrist, and its eyes still bound: it remained in this state throughout the night without disturbing its master. The time of repose passed off so calmly that none of us awoke to keep in the torch-lights, which the boys had supplied us with, and we did not get up till after sunrise. After breakfast, I

called out the accustomed summons for our setting out; but my young ones had some projects in their heads, and neither they nor their mother were just then in the humour to obey me.

"Let us reflect a little first," said my wife: "as we had so much difficulty in felling the palm-tree, would it not be a pity to lose our labour, by leaving it in this place? Ernest tells me it is a sago-tree; if so, the pith would be fine for our soups. Do, my dear, examine it, and let us see if in any way we can turn it to account."

I found she was in the right: but in that case it was necessary to employ a day in the business; since, to lay open from one end to the other a tree of such a length and substance was no easy task. I however consented; as, independent of the use of the pith, I could, by emptying it, obtain two handsome and large troughs for the conveyance of water from the river to my wife's kitchen-garden at Tent House, and thence to my new plantations of trees.

Fritz. One of the halves, father, will answer that purpose, and the other will serve as

a pipe for our little stream from Falcon's Nest into my pretty basin lined with tortoise-shell; we then shall constantly have the agreeable view of a fountain close to our dwelling: I fancy it now before my eyes, and that I see its course.

"And I, for my part," said Ernest, "long for a sight of the sago formed into small grains, as I have seen it in Europe."

I now desired them to bring me the graters they had used for the manioc, and observed that they had to assist me in raising the palm-tree from the ground, which must be done, continued I, by fixing at each end two small cross pieces or props to support it; to split it open as it lies would be a work of too much labour: this done, I shall want several wooden wedges to keep the cleft open while I am sawing it, and afterward a sufficient quantity of water. "There is the difficulty," said my wife; "our Falcon's Stream is too far off, and we have not yet discovered any spring in the neighbourhood of this place."

Ernest. That is of no consequence, mother; I have seen hereabout so great an abundance of the plants which contain water, that we

need not be at a loss; for they will fully supply us, if I could only contrive to get vessels enough to hold it.

We now produced the enormous reeds we had brought home, which being hollow, would answer the purpose of vessels; and as some time was required to draw off the water from such small tubes, he and Francis at once set to work; they cut a number of the plants, which they placed over the brim of a vessel, and while that was filling, they were preparing another. The rest of us got round the tree, and with our united strength we soon succeeded in raising the heavy trunk, and the top of it was then sawed off. We next began to split it through the whole length, and this the softness of the wood enabled us to do with little trouble. We soon reached the pith or marrow that fills up the middle of the trunk the whole of its length. When divided, we laid one half on the ground, and we pressed the pith together with our hands, so as to make temporary room for the pith of the other half of the trunk, which rested still on the props. We wished to empty it entirely, that we might employ it as a kneading-trough, leaving merely enough of the pith at both

ends to prevent a running-out; and then we proceeded to form our paste.

My young manufacturers fell joyfully to work: they brought water, and poured it gradually into the trough while we mixed it with the flour. In a short time the paste appeared sufficiently fermented; I then made a hole at the bottom of the grater on its outside, and pressed the paste strongly with my hand: the farinaceous parts passed with ease through the small holes of the grater, and the woody parts which did not pass were thrown aside in a heap, in the hope that mushrooms, &c. might spring from them. My boys were in readiness to receive in the reed vessels what fell from the grater, and conveyed it directly to their mother, whose business was to spread out the small grains in the sun upon sail-cloth, for the purpose of drying them. Thus we procured a good supply of a wholesome and pleasant food. The paste which remained was thrown upon the mushroom-bed, and watered well to promote a fermentation.

We next employed ourselves in loading the cart with our tools and the two halves of the tree. Night coming on, we retired to our hut, where we enjoyed our usual repose, and early

next morning were ready to return to Falcon's Stream. Our buffalo now commenced his service, yoked with the cow; he supplied the want of the ass, and was very tractable: it is true, I led him by the cord in his nose, and thus restrained him whenever he was disposed to deviate from his duty.

We returned the same way as we came, in order to load the cart with a provision of berries, wax, and elastic gum. I sent forward Fritz and Jack as a guard, with one of the dogs; they were to cut an ample road through the bushes for our cart. The two water conductors, which were very long, produced numerous difficulties, and somewhat stopped our progress. We reached the wax and gum-trees with tolerable speed and without any accident, and halted to place our sacks of berries in the cart. The elastic gum had not yielded as much as I expected, from the too rapid thickening caused by a hot sun. We obtained however about a quart, which sufficed for the experiment of the boots I had so long desired.

We set out again, still preceded by our pioneers, who cleared the way for us through the little wood of guavas. Suddenly we

heard a dreadful noise, which came from our guard, and beheld Fritz and Jack hastening towards us. I began now to fear a tiger or panther was near at hand, and had perhaps attacked them. Turk began to bark so frightfully, and Flora joined in so hideous a yell, that I prepared myself for a bloody fight. I advanced at the head of my troop to the assistance of my dogs, who ran furiously up to a thicket, where they stopped, and with their noses to the ground, and almost breathless, strove to enter it. I had no doubt some terrible animal was lurking there; and Fritz, who had seen it through the leaves, confirmed my suspicion; he said it was about the size of the young buffalo, and that his hair was black and shaggy. I was going to fire at it promiscuously in the thicket, when Jack, who had thrown himself on his face on the ground to have a better view of the animal, got up in a fit of laughter.—"It is only," exclaimed he, "our old sow, who is never tired of playing off her tricks upon us." Half-vexed, half-laughing, we broke into the midst of the thicket, where in reality we found our old companion; she had round her seven little creatures, which had been littered a few days.

This discovery gave us considerable satisfaction, and we all greeted the good matron, who seemed to recollect and welcome us with a sociable kind of grunting. And now a general consultation took place—should this new family be left where we found it, or conveyed to Falcon's Stream? Opinions being at variance, it was decided that for the present they should keep quiet possession of their retreat.

We then pursued our road, and arrived at Falcon's Stream in safety, experiencing what is so generally true, that home is always dear to the heart. All was in due order, and our animals welcomed our return in their own manner, but which did not fail to be expressive of their satisfaction in seeing us again. We threw them some of the food they were most partial to, which they greedily accepted, and then voluntarily went back to their usual stand. It was necessary to tie up the buffalo again, to inure it by degrees to confinement; and the Malabar eagle shared the same fate: Fritz chose to place it near the parrot on the root of a tree; he fastened it with a piece of packthread, of sufficient length to allow it free motion, and uncovered its eyes: till then the bird had been tolerably quiet; but the instant

it was restored to light it fell into a species of rage that surprised us; it proudly raised its head, its feathers became ruffled, and its eyeballs seemed to whirl in their orbits, and dart out vivid lightnings. All the poultry were terrified and fled; but the poor luckless parrot was too near the sanguinary creature to escape. Before we were aware of the danger, it was seized and mangled by the hooked beak of the eagle. Fritz vented his anger loudly; he would have killed the murderer on the spot, had not Ernest run up and entreated him to spare its life: "Parrots," said he, "we shall find in plenty, but never perhaps so magnificent a bird as this eagle, which, as father observes, we may train for hawking. You may too blame only yourself for the parrot's death; why did you uncover his eyes? I could have told you that falconers keep them covered six weeks, till they are completely tamed. But now, brother, let me have the care of him; let me manage the unruly fellow; he shall soon be as submissive as a new-born puppy."

Fritz refused to part with his eagle, and Ernest did not long oppose giving him the information he wanted: "I have read," said

he, "somewhere, that the Caribs puff tobacco-smoke into the nostrils of the birds of prey and of the parrots they catch, until they are giddy and almost senseless; this over, they are no longer wild."

Fritz resolved on the experiment: he took some tobacco and a pipe, of which we had plenty in the sailors' chests, and began to smoke, at the same time gradually approaching the unruly bird. As soon as it was somewhat composed, he replaced the fillet over the eyes, and smoked close to its beak and nostrils, so effectually that it became motionless on the spot, and had the exact air of a stuffed bird. Fritz thought it dead, and was inclined to be angry with his brother; but I told him it would not hold on the perch if it were lifeless, and that its head alone was affected; and so it proved. The favourite came to itself by degrees, and made no noise when its eyes were unbound; it looked at us with an air of surprise, but not of fury, and grew tamer and calmer every day. The care of the monkey was now by all adjudged to Ernest as a reward, and he took formal possession of it, and made it lie down near him.

We next began a business which we had long determined on; it was to plant bamboos close to all the young trees, to support them in their growth. We had our cart loaded with canes in readiness, and a large pointed iron to dig holes in the ground.

We began our work at the entrance of the avenue nearest to Falcon's Stream. The walnut, chestnut, and cherry-trees we had planted in a regular line and at equal distances, we found disposed to bend considerably to one side. Being the strongest, I took the task of making holes with the implement upon myself, which, as the soil was light, I easily performed. The boys selected the bamboos, cut them of equal lengths, and pointed the ends to go into the ground. When they were well fixed, we threw up the earth compactly about them, and fastened the sapling by the branches to them with some long straight tendrils of a plant which we found near the spot. In the midst of our exertions we entered into a conversation respecting the culture of trees. Till then my boys had only thought of eating fruits, without giving themselves much trouble about their production

but now their curiosity was excited, and they asked a thousand questions, which I answered as well as I could.

Towards the evening, a keen appetite hastened our return to Falcon's Stream, where we found an excellent supper prepared by my wife.

When our hunger was appeased, a new subject was introduced, which I and my wife had been thinking of for some time: she found it difficult, and even dangerous, to ascend and descend our tree with a rope-ladder.

My wife had repeatedly applied to me to remedy this evil, and my own anxiety had often made me think if the thing were really possible. A staircase on the outside was not to be thought of; the great height of the tree rendered that impracticable, as I had nothing to rest it on, and should be at a loss to find beams to sustain it; but I had for some time formed the idea of constructing winding stairs within the immense trunk of the tree, if it should happen to be hollow, or I could contrive to make it so; I had heard the boys talking of a hollow in our tree, and of a swarm of bees issuing from it, and I now, therefore, went to examine whether the hollow extended to the

roots, or what its circumference might be. The boys seized the idea with ardour; they sprang up, and climbed to the tops of the roots like squirrels, to strike at the trunk with axes, and to judge from the sound how far it was hollow; but they soon paid dearly for their attempt; the whole swarm of bees, alarmed at the noise made against their dwelling, issued forth, attacked the little disturbers, began to sting them, and soon put them to flight, uttering lamentable cries. My wife and I had some trouble to stop the course of their uproar, and cover their little wounds with fresh earth to allay the smart. Jack, whose temper was on all occasions rash, had struck fiercely upon the bees' nest, and was more severely attacked by them than the rest; it was necessary, so serious was the injury, to cover the whole of his face with linen. The less active Ernest got up the last, and was the first to run off when he saw the consequences, and thus avoided any further injury than a sting or two; but some hours elapsed before the other boys could open their eyes, or be in the least relieved from the acute pain that had been inflicted. When they grew a little better, the desire of being revenged of the insects that had so

roughly used them had the ascendant in their minds: they teased me to hasten the measures for getting every thing in readiness for obtaining possession of their honey. The bees in the mean time were still buzzing furiously round the tree. I prepared tobacco, a pipe, some clay, chisels, hammers, &c. I took the large gourd long intended for a hive, and I fitted a place for it, by nailing a piece of board on a branch of the tree; I made a straw roof for the top, to screen it from the sun and rain; and we deferred the attack of the fortress to the following day, and got ready for a sound sleep, which finished the cure of my wounded patients.

CHAPTER XXVI.

Treatment of Bees—Staircase—Training of various Animals—Manufactures, &c.

Next morning, almost before dawn, all were up and in motion; the bees had returned to their cells, and I stopped the passages with clay, leaving only a sufficient hole

for the tube of my pipe. I then smoked as much as was requisite to stupify, without killing, the little creatures. Not having a cap with a mask, such as bee-catchers usually wear, nor even gloves, this precaution was necessary. At first a humming was heard in the hollow of the tree, and a noise like a gathering tempest, which died away by degrees. All was become calm, and I withdrew my tube without the appearance of a single bee. Fritz had got up by me: we then began with a chisel and a small axe to cut out of the tree, under the bees' hole of entrance, a piece three feet square. Before it was entirely separated I repeated the smoking. As soon as I supposed them lulled again, I separated from the trunk the piece I had cut out, making, as it were, a window, through which the inside of the tree was laid open to view; and we were filled at once with joy and astonishment on beholding the immense and wonderful work of this colony of insects. There was such a stock of wax and honey that we feared our vessels would be insufficient to contain it. The whole interior of the tree was lined with fine honey-combs: I cut them off with care, and put them in the gourds the boys con-

stantly supplied me with. When I had somewhat cleared the cavity, I put the upper combs, in which the bees had assembled in clusters and swarms, into the gourd which was to serve as a hive, and placed it on the plank I had purposely raised. I came down, bringing with me the rest of the honey-combs, with which I filled a small cask, previously well washed in the stream. Some I kept out for a treat at dinner; and had the barrel carefully covered with cloths and planks, that the bees, when attracted by the smell, might be unable to get at it. We assembled round the table, and ate plentifully. My wife then put by the remainder; and I proposed to my sons to go back to the tree, to prevent the bees from swarming again there on being roused from their stupor, as they would not have failed to do but for the precaution I took of passing a board at the aperture, and burning a few handfuls of tobacco on it, the smell and smoke of which drove them back whenever they attempted to return. At length they desisted, and became gradually reconciled to their new residence, where their queen no doubt had settled herself. I took this opportunity to relate to my children all I had read in the inter-

esting work by Mr. Huber of Geneva, of the queen-bee, this respected mother of her subjects, who take care of and guard her, work for her, nourish the rising swarms, make the cells in which they are to lodge, prepare others of a different shape, as well as food for the young queens destined to lead forth the fresh colonies. I now advised that all should watch during the night over the whole provision of honey obtained while the bees were torpid, who, when recovered, would not fail to be troublesome, and come in legions to get back their property; and to this end we threw ourselves on our beds, in our clothes, to take an early doze: on awaking about nightfall, we found the bees quiet in the gourd, or settled in clusters upon near branches; so we went to business. The cask of honey was emptied into a kettle, except a few prime combs, which we kept for daily food; the remainder, mixed with a little water, was set over a gentle fire, and reduced to a liquid, strained and squeezed through a bag, and afterward poured back into the cask, which was left upright and uncovered all night to cool. In the morning the wax was entirely separated, and had risen to the surface in a compact and solid cake that

was easily removed; beneath was the purest, most beautiful, and delicate honey that could be seen: the cask was then carefully headed again, and put into cool ground near our wine-vessels. This task finished, I mounted to revisit the hive, and found every thing in order; the bees going forth in swarms, and returning loaded with wax, from which I judged they were forming fresh buildings in their new dwelling-place. I had been surprised that the numbers occupying the trunk of the tree should find room in the gourd, till I perceived the clusters upon the branches, and I thence concluded a young queen was among each of them. In consequence, I got another gourd, into which I shook them, and placed it by the former: thus I had the satisfaction of obtaining two fine hives of bees in activity.

We soon after these operations proceeded to examine the inside of the tree. I sounded it with a pole from the opening I had made; and a stone fastened to a string served us to sound the bottom, and thus to ascertain the height and depth of the hollow. To my great surprise, the pole went without any resistance to the branches on which our dwelling rested, and the stone descended to the roots. The

trunk, it appeared, had wholly lost its pith, and most of its wood internally. It seems that this species of tree, like the willow in our climates, receives nourishment through the bark; for it did not look decayed, and its far-extended branches were beautiful in the extreme. I determined to begin our construction in its capacious hollow that very day. The undertaking appeared at first beyond our powers; but intelligence, patience, time, and a firm resolution vanquished all obstacles. I was pleased to find opportunity to keep my sons in continual action, and their minds and bodies were all the better for exertion. They grew tall and strong, and were too much engaged to regret any of their past enjoyments.

We began to cut into the side of the tree towards the sea, a door-way equal in size to the door of the captain's cabin, which we had removed with all its frame-work and windows. We next cleared away from the hollow all the rotten wood, and rendered the inside even and smooth, leaving sufficient thickness for cutting out resting places for the winding stairs, without injuring the bark. I then fixed in the centre the trunk of a tree about twenty feet in length, and a foot thick, completely stripped

of its branches, in order to carry my winding staircase round it: on the outside of this trunk, and the inside of the hollow of our own tree, we formed grooves, so fixed as to fit the distances at which the boards were to be placed to form the stairs. These were continued till I had got to the height of the trunk round which they turned. I made two more holes at suitable distances, and thus completely lighted the whole ascent. I also effected an opening near our room, that I might more conveniently finish the upper part of the staircase. A second trunk was fixed upon the first, and firmly sustained with screws and cross beams. It was surrounded like the other, with stairs cut slopingly; and thus we happily effected the undertaking of conducting it to the level of our bedchamber. Here I made another door directly into it. To render it more solid and agreeable, I closed the spaces between the stairs with plank. I then fastened two strong ropes, the one descending the length of the central trunk, the other along the inside of our large tree, to assist in case of slipping. I fixed the sash windows taken from the captain's cabin in the holes we had

made to give light to the stairs; and I then found I could add nothing further to my design. When the whole was complete, it was so pretty, solid, and convenient, that we were never tired of going up and coming down it. Our success was owing to the firm resolution adopted by all, to persevere in patient industry and constant efforts to the end; and it employed us many weeks.

I have now to relate some occurrences that took place during the making of our staircase.

A few days after the commencement of our work, our brave Flora whelped us six young puppies, all healthy, and likely to live. The number was so alarming, that I was under the necessity of drowning all but a male and female to keep up the breed. A few days later, the two she-goats gave us two kids, and our ewes five lambs; so that we now saw ourselves in possession of a pretty flock: but lest the domestic animals should follow the example of the ass, and run away from us, I tied a bell to the neck of each. We had found a sufficient number of bells in the vessel, which had been shipped for trading with the savages; it being one of the articles they most

value. We could now immediately trace a runaway by the sound, and bring it back to the fold.

Next to the winding stairs, my chief occupation was the management of the young buffalo, whose wound in the nose was quite healed, so that I could lead it at will with a cord or stick passed through the hole, as the Caffrarians do. I preferred the stick, which answered the purpose of a bit, and I resolved to break-in this beast for riding as well as drawing. It was already used to the shafts, and very tractable in them; but I had more trouble in accustoming him to the rider, and to wear a girth, having made one out of the old buffalo's hide. I formed a sort of saddle with sail-cloth, and tacked it to the girth. Upon this I fixed a burthen, which I increased by degrees. I was indefatigable in the training of the animal, and soon brought it to carry, patiently, large bags of potatoes, salt, and other articles, in the place of the ass. The monkey was his first rider, who stuck so close to the saddle, that, in spite of the plunging and kicking of the buffalo, it was not thrown. Francis was then tried, as the lightest of the family; but throughout his ride I led the

beast with a halter, that it might not throw him off. Jack now showed some impatience to mount the animal in his turn. I next passed the stick through the buffalo's nose, and tied strong cords at each end of it, bringing them together over the neck of the animal, and put this new-fangled bridle into the hands of the young rider, directing him how to use it. For a time the lad kept his saddle, notwithstanding the unruly gestures of the creature; at length a side jolt threw him on the sand, without his receiving much injury. Ernest, Fritz, and lastly myself, got on successively, with more or less effect. His trotting shook us to the very centre, the rapidity of his gallop turned us giddy, and our lessons in horsemanship were repeated many days before the animal was tamed, and could be rode with either safety or pleasure. At last, however, we succeeded without any serious accident; and the strength and swiftness of our saddled buffalo were great. It seemed to sport with the heaviest loads. My three eldest boys mounted it together now and then, and it ran with them with great swiftness. By continued attentions it at length became extremely gentle: it was not in the least apt to

start; and I really felt satisfaction in being thus enabled to make my sons good riders, so that if they should ever have horses, they might get on the most restive and fiery without fear: none could be compared to our young buffalo; and the ass, which I had intended to employ in the same way, was far surpassed by this new member of our family. Fritz and Jack, with my instructions, amused themselves in training the animal as horses are exercised in a riding-house: and by means of the little stick through the nose, they were able to do what they pleased with him.

In the midst of all this, Fritz did not neglect his eagle; he daily shot some small birds, which he gave it to eat, placing them sometimes between the buffalo's horns, sometimes on the back of one of the hens, or of a flamingo, or on a shelf, or at the end of a stick, in order to teach it to pounce like a falcon upon other birds. He taught it to perch on his wrist whenever he called or whistled to it; but some time passed away before he could trust it to fly without securing its return by a long string.

Our whole company, including even the lazy Ernest, was infected with the passion of

becoming instructers. Ernest tried his talents in this way with his monkey, who seldom failed to furnish him with work. It was ludicrous to see the lad: he whose movements were habitually slow and studied, now constrained to skip and jump, and play a thousand antics with his pupil during training hours. He and Jack made a little hamper of rushes, very light: they put three straps to it, two of which passed under the fore, and one between the hind-legs of the animal, and were then fastened to a belt in front, to keep the hamper steady on the back of the mischievous urchin. This apparatus was at first intolerable to poor Knips; he gnashed his teeth, rolled on the ground, jumping like a mad creature, and did every thing to get rid of it; but all in vain, for education was the standing order, and he soon found he must submit. The hamper was left on day and night, its sole food was what was thrown into it; and in a short time pug was so much accustomed to the burden, that he began to spit and growl whenever we attempted to take it off, and every thing given to the creature to hold was instantly thrown into it. Knips became at length a useful member of our society; but he would only

obey Ernest, whom he at once loved and feared; thus affording a proof of at least one of the great ends of all instruction.

These different occupations filled up several hours of the day; when, after working at our stairs, we assembled in the evening round our best of friends, the good mother, to rest ourselves: and forming a little circle, every individual of which was affectionate and cheerful, it was her turn to give us some agreeable and less fatiguing occupation in the domestic concerns of Falcon's Stream: such as improving our candle-manufactory, by employing the reed-moulds invented by Jack; but having found some difficulty in taking out the candles when cold, I adopted the plan of dividing the moulds, cleaning the inside, and rubbing it over with a little butter, to prevent the wax from adhering to it; then to join both halves with a string that could be loosened at pleasure, to facilitate the extraction of the tapers. The wicks gave us most trouble, as we had no cotton. We tried with moderate success the fibrous threads of the karrata, and those of the algava or flame-wood; but each had the inconvenience of becoming a sort of coal or cinder. The produc-

tion which gave us the most satisfaction was the pith of a species of elder.

We now began to think of manufacturing our boots without seams, of the caoutchouc or elastic gum. I began with a pair for myself; and I encouraged my children to afford a specimen of their industry, by trying to form some flasks and cups that could not break. They began by making some clay moulds, which they covered with layers of gum, agreeably to the instructions I had given them. In the mean while I filled a pair of stockings with sand, and covered them with a layer of clay, which I first dried in the shade, and afterward in the sun. I then took a sole of buffalo leather, well beaten, and studded round with tacks, which served me to fix it under the foot of the stocking; after this I poured the liquid gum into all the cracks, which on drying produced a close sticking between the leather and the stocking sole. I next proceeded to smear the whole with a coat of resin of a tolerable thickness; and as soon as this layer was dried on, I put on another, and so on till I had applied a sufficiency with my brush. After this I emptied the sand, drew out the stocking, removed the

hardened clay, shook off the dust, and thus obtained a pair of seamless boots, tolerably warm, soft, smooth, and completely waterproof. I hung them up directly, that they might dry without shrinking. They fitted uncommonly well; and my four lads were so highly pleased with their appearance, that they skipped about with joy, as they asked me to make each of them a pair. I refrained from any promise, because I wished to try their strength previously, and to compare them with boots made out of mere buffalo-leather. Of these I at once began a pair for Fritz, with a piece of the slaughtered buffalo's skin. They gave far more trouble than those manufactured with the caoutchouc. The work turned out very imperfect, and so inferior to my boots, that Fritz wore them reluctantly; and the more so, as his brothers shouted with laughter at the difficulty he had to run in them.

We had also been engaged in making our fountain, which afforded a perpetual source of pleasure to my wife, and indeed to all of us. In the upper part of the Stream we built with stakes and stones a kind of dam that raised the water sufficiently to convey it into the

palm-tree troughs; and afterward, by means of a gentle slope, to glide on near to our habitation, where it fell into the tortoise-shell basin, which we had raised on stones to a certain height for our convenience; and it was so contrived that the redundant water passed off through a cane pipe fitted to it. I placed two sti ks across each other for the gourds, that served as pails, to rest on; and we thus produced, close to our abode, an agreeable fountain, supplying us with a pure crystal fluid, such as we frequently could not get when we drew our water from the bed of the river, which was often encumbered with the leaves and earth fallen into it, or rendered muddy by our water-fowls. The only inconvenience was, that the water, flowing in this open state through the narrow channels in a slender stream, was heated, and not cool and refreshing when it reached us. I resolved to obviate this inconvenience at my future leisure, by employing large bamboo-canes fixed deep enough in the ground to keep the water cool.

CHAPTER XXVII.

The Wild Ass—Difficulty in breaking it—The Heath-Fowl's Nest.

We were scarcely up one morning, and had got to work in putting the last hand to our winding staircase, when we heard at a distance two strange kind of voices, that resembled the howlings of wild beasts mixed with hissings and sounds of some creature at its last gasp; and I was not without uneasiness: our dogs too pricked up their ears, and seemed to whet their teeth for a fight with a dangerous enemy.

From their looks we judged it prudent to put ourselves in a state of defence; we loaded our guns and pistols, placed them within our castle in the tree, and prepared to repel any attack from that quarter. The howlings having ceased an instant, I descended, well armed, and put on our two faithful guardians their spiked collars and side-guards: I assembled our cattle about the tree to have them in sight, and I reascended to look around

for the enemy's approach. Jack wished they might be lions—"I should like," said he, "to have a near view of the king of beasts, and should not be in the least afraid of him."

At this instant the howlings were renewed, and almost close to us. Fritz got as near the spot as he could, listened attentively and with eager looks, then threw down his gun, and burst into a loud laughter, exclaiming, "Father, it is our ass! the deserter comes back to us: listen! do you not hear his brayings?" I listened, and a fresh roar raised loud peals of laughter among us; and then followed the usual train of jests and mutual banter at the alarm we had one and all betrayed. Shortly after, we had the satisfaction of seeing among the trees our old friend Grizzle, moving towards us leisurely, and stopping now and then to browse; but, to our great joy, he was accompanied by one of his own species, of very superior beauty; and when it was nearer, I knew it to be a fine onagra, or wild ass, which I had a strong desire to possess, though at the same time aware of the extreme difficulty there would be in taming and rendering him subject to our use. Some writers, who have described it under the name of the

Œigitai (or long-eared horse), given it by the Tartars, affirm that the taming it has been ever found impracticable; but my mind furnished an idea on the subject which I was resolved to act on if I got possession of the handsome creature. Without delay I descended the ladder with Fritz, desiring his brothers to keep still; and I consulted my son on the means of taking the stranger captive.

I got ready, as soon as possible, a long cord with a running knot, one end of which I tied fast to the root of a tree; the noose was kept open with a little stick slightly fixed in the opening, so as to fall of itself on the cord being thrown round the neck of the animal, whose efforts to escape would draw the knot closer. I also prepared a piece of bamboo about two feet long, which I split at the bottom, and tied fast at top, to serve as nippers. Fritz attentively examined my contrivance, without seeing the use of it. Prompted by the impatience of youth, he took the ball-sling, and proposed aiming at the wild ass with it, which he said was the shortest way of proceeding. I declined adopting this method, fearing the attempt might fail, and the beautiful creature avail itself of its velocity to

escape us: I therefore told him my project of catching it in the noose, which I gave him to manage, as being nimbler and more expert than myself. The two asses drew nearer and nearer to us. Fritz, holding in his hand the open noose, moved softly on from behind the tree where we were hid, and advanced as far as the length of the rope allowed him: the onagra started on seeing a human figure; it sprang some paces backward, then stopped as if to examine the unknown form; but as Fritz now remained quite still, the animal resumed its composure, and continued to browse. Soon after he approached the old ass, hoping that the confidence that would be shown by it would raise a similar feeling in the stranger: he held out a handful of oats mixed with salt; our ass instantly ran up to take its favourite food, and greedily ate it; this was quickly perceived by the other. It drew near, raised its head, breathed strongly, and came up so close, that Fritz, seizing the opportunity, succeeded in throwing the rope round its neck; but the motion and stroke so affrighted the beast, that it instantly sprang off. It was soon checked by the cord, which almost stopped its breath: it could go no farther, and,

after many exhausting efforts, it sank panting for breath upon the ground. I hastened to loosen the cord, and prevent its being strangled. I then quickly threw our ass's halter over its head; I fixed the nose in my split cane, which I secured at the bottom with packthread. Thus I succeeded in subduing the first alarm of this wild animal, as farriers shoe a horse for the first time. I wholly removed the noose, that seemed to bring the creature into a dangerous situation; I fastened the halter with two long ropes to two roots near us, on the right and left, and let the animal recover itself, noticing its actions, and devising the best way to tame it.

The rest of my family had by this time come down from the tree, and beheld the fine creature, its graceful shape, and well-turned limbs, which placed it so much above the ass, and nearly raised it to the structure of the horse. In a few moments the onagra got up again, struck furiously with its foot, and seemed resolved to free itself from all bonds: but the pain of its nose, which was grasped and violently squeezed in the bamboo, forced it to lie down again. Fritz and I now gently undid the cords, and half-led, half-dragged it,

between two roots closely connected, to which we fastened it afresh, so as to give the least scope for motion, and thus render its escape impracticable. We also guarded against master Grizzle playing truant again, and tied him fast with a new halter, confining its fore-legs with a rope. I then fastened it and the wild ass side by side, and put before both plenty of good food to solace their impatience of captivity.

We had now the additional occupation of training the onagra for our service or our pleasure, as might turn out to be most practicable: my boys exulted in the idea of riding it, and we repeatedly congratulated each other on the good fortune which had thus resulted from the flight of our ass. Yet I did not conceal that we should have many difficulties to encounter in taming it, though it seemed very young, and not even to have reached its full growth. But I was inclined to think proper means had not been hitherto adopted, and that the hunters, almost as savage as the animals themselves, had not employed sufficient art and patience. I therefore determined to resort to all possible measures. I let the nippers remain on its nose, which appeared to

distress him greatly, though we could plainly perceive their good effect in subduing the creature; for without them no one could have ventured to approach him. I took them off, however, at times, when I gave it food, to render eating easier, and I began, as with the buffalo, by placing a bundle of sail-cloth on its back, to inure it to carry. When accustomed to the load, I strove to render the beast by degrees still more gentle, by hunger and thirst; and I observed with pleasure, that when it had fasted a little and I supplied it with food, its look and actions were less wild. I also forced the animal to keep erect on its four legs, by drawing the cords closer that fastened it to the roots, in order to subdue gradually by fatigue its natural wildness. The children came in turns to play with it, and scratch its ears gently, which were remarkably tender; and it was on these I resolved to make my last trial, if all other endeavours failed. For a long time we despaired of success; the onagra made furious starts and leaps when any of us went near it, kicked with its hind-feet, and even attempted to bite those who touched it. This obliged me to have recourse to a muzzle, which I

managed with rushes, and put on when it was not feeding. To avoid being struck by its hind-feet, I partially confined them, by fastening them to the fore-feet with cords, which, however, I left moderately loose, that we might not encroach too much upon the motion necessary for its health. It was at length familiarized to this discipline, and was no longer in a rage when we approached, but grew less impatient daily.

At last we ventured to free it by degrees from its restraints, and to ride it as we had done with the buffalo, still keeping the fore-feet tied; but notwithstanding this precaution and every preceding means, it proved as fierce and unruly as ever for the moment. The monkey, who was first put on its back, held on pretty well by clinging to its mane, from which it was hung as often as the onagra furiously reared and plunged; it was therefore for the present impracticable for either of my sons to get upon it. The perverse beast baffled all our efforts, and the perilous task of breaking it was still to be persevered in with terror. In the stable it seemed tolerably quiet and gentle; but the moment it was in any degree unshackled, it became wholly unmanageable.

I was at length reduced to my last expedient, but not without much regret, as I resolved, if it did not answer, to restore the animal to full liberty. I tried to mount the onagra, and just as in the act of rearing up violently to prevent me, I seized with my teeth one of the long ears of the enraged creature, and bit it till it bled; instantly it stood almost erect on its hind-feet, motionless, and as stiff as a stake; it soon lowered itself by degrees, while I still held its ear between my teeth. Fritz seized the moment, and sprang on his back; Jack, with the help of his mother, did the same, holding by his brother, who on his part clung to the girth. When both assured me they were firmly seated, I let go the ear: the onagra made a few springs less violent than the former, and, checked by the cords on its feet, it gradually submitted, began to trot up and down more quietly, and ultimately grew so tractable, that riding it became one of our chief pleasures. My lads were soon expert horsemen; and their horse, though rather long-eared, was very handsome and well broken in.

I now explained to my companions that I earned this mode of taming from a horse-breaker I met with by chance. He had lived

long in America, and carried on the skin-trade with the savages, to whom he took, in exchange, various European goods. He employed in these journeys half-tamed horses of the southern provinces of that country, which are caught in snares or with nooses. They are at first unruly, and resist burdens; but as soon as the hunter bites one of their ears, they become mild and submissive, and at last so docile that any thing may be done with them. The journey is continued through forests and over heaths to the dwellings of the savages; skins are given in barter for the goods brought them, with which the horses are reloaded. They set out again on their return, and are directed by the compass and stars to the European settlements, where they profitably dispose of their skins and horses.

In a few weeks the onagra was so effectually tamed, that we all could mount it without fear. In the room of a bit, I contrived a curb, and with this and a good bite applied, as wanted, to the ear, it went to right or left at the will of the rider. Now and then I mounted it myself, and not without an emotion of pride at my success in subduing an animal that had been considered by travellers and naturalists

as absolutely beyond the power of man to tame. But how superior was my gratification, on seeing Fritz spring at any time on the creature's back, drive along like lightning, and do what he pleased with it.

During the training of our horse, which we named *Lightfoot*, a triple brood of our hens had given us a crowd of little feathered beings; forty of these at least were chirping and hopping about us, to the great satisfaction of my wife, whose zealous care of them sometimes made me smile.

This increase of our poultry reminded us of a thing we had long thought of, and was not in prudence to be deferred any longer; this was the building, between the roots of our great tree, covered sheds for all our animals. The rainy season, which is the winter of these countries, was drawing near, and to avoid losing most of our stock, it was requisite to shelter it.

We began by forming a kind of roof above the arched roots of our tree, and employed bamboo canes for the purpose: the longest and strongest supported the roofing instead of columns, the smaller more closely united and composed the roof itself. I filled up the

holes with moss and clay, and I spread over the whole a thick coat of tar. By these means I formed a solid covering, capable of bearing weight. I then made a railing round it, which gave the appearance of a pretty balcony, under which, between the roots, were various stalls, sheltered from rain and sun, that could be easily shut and separated from each other by means of planks nailed upon the roots: part of them were calculated to serve as a stable and yard, part as an eating-room, a store-room, &c., and as a hay-loft to keep our hay and provisions dry in. This work was soon completed; but afterward it was necessary to fill these places with stores of every kind for our supply throughout the wet season. In this task we engaged diligently, and went daily here and there with our cart to collect every thing useful, and that might give us employment when the weather prevented our going far.

One evening, on our return from digging up potatoes, as our cart, loaded with bags, drawn by the buffalo, ass, and cow, was gently rolling along, seeing still a vacant place in the carriage, I advised my wife to go home with the two youngest boys, while I went round by the wood of oaks with Ernest and Fritz, to gather

as many sweet acorns as we could find room for. We had still some empty sacks. Ernest was accompanied by his monkey, who seldom left him; and Fritz, horseman-like, was on his dear onagra, which he had appropriated to himself, inasmuch as he had helped to take and tame it, and indeed because he knew how to manage it better than his brothers. Ernest was too lazy, and preferred walking at ease with the monkey on his shoulder, and the more so because it spared him the trouble of gathering fruit.

When we reached the oaks, Lightfoot was tied to a bush, and we set actively to work to gather the acorns that had dropped from the trees. While all were busily employed, the monkey quitted its master's shoulder, and skipped unperceived into an adjoining bush. It had been there some time when we heard on that side the loud cries of birds and flapping of wings, and this assured us a sharp conflict was going on between master Knips and the inhabitants of the bushes. I despatched Ernest to look around. He went stoutly towards the place, and in an instant we heard him exclaim, "Come quickly, father! A fine heath-fowl's nest full of eggs: Mr. Knips, as usual, wished

to make a meal of them; the hen and he are fighting for it: come quick, Fritz, and take her; I am holding greedy-chops as well as I can."

Fritz ran up directly, and in a few moments brought out alive the male and female heath-fowl, both very beautiful; the cock finely collared, similar to the one he had killed on a former occasion. And now Ernest came forward, driving the monkey before him, and carrying his hat with the utmost care: he had stuck his girdle full of narrow sharp-pointed leaves, in shape like a knife-blade, which reminded me of the production named sword-grass; but I did not pay much attention, as I was too busily engaged in our egg-hunt, and considered his decoration as childishness. On coming up to me he uncovered his hat, and gave it me in a transport of joy, crying out, "Here, father, are some heath-fowls' eggs. I found them in a nest so well concealed under these long leaves, that I should not have observed them, had not the hen, in defending herself against the monkey, scattered them about. I am going to take them home, they will please my mother; and these leaves will amuse Francis, for they are like swords.

and he will like them for a plaything." I applauded Ernest's kind thought, and I encouraged him and Fritz to be thus ever considerate for the absent. It was now time to think of moving homeward: my two sons filled the bags with acorns, and put them on Lightfoot. Fritz mounted, Ernest carried the eggs, I took charge of the hen, and we proceeded to Falcon's Stream, followed by our train-wagon. Our good cattle were in such complete subjection that it was only necessary to speak to them. I remarked Ernest often applying his ear to the hat which held the eggs, as if he thought the little ones were near coming forth; I listened also, and observed some shells already broken and the young protruding: we were overjoyed at our good luck, and Fritz could not refrain from trotting on briskly to bear the tidings to his mother. When arrived, our first care was to examine the eggs: the female bird was too frightened and wild to sit upon them; fortunately, we had a hen that was hatching; her eggs were immediately removed, and the new ones put in their place: the female heath-fowl was put into the parrot's cage, and hung up in the room, to accustom it to our society

In less than three days all the chickens were hatched; they kept close to their foster-mother, and ate greedily a mixture of sweet acorns bruised in milk, such as we gave our tame poultry: as they grew up, I plucked out the large feathers of their wings, lest they should naturally take flight; but they and their real parent gradually became so domesticated, that they daily accompanied our feathered stock in search of food, and regularly came back at night to the roost I had prepared for them, and in which this little new colony of feathered beings seemed to delight.

CHAPTER XXVIII.

Flax—The Rainy Season.

Francis for a short time was highly pleased with his sword-leaves, and then, like a child, he grew weary of them, and they were thrown aside. Fritz picked up some of them that were quite soft and withered: "Francis," said he, "you can make whips of your sword-grass,

and they will be of use in driving your goats and sheep." It had been lately decided that it should be the business of Francis to lead these to pasture. Fritz accordingly sat down to help him to divide the leaves, and afterward plait them into whip-cords. As they were working, I saw with pleasure the flexibility and strength of the bands; I examined them more closely, and found they were composed of long fibres; and this discovery led me to suppose that this sword-grass might be a very different thing, and not improbably the flax-plant of New-Zealand. This was a valuable discovery: I knew how much my wife wished for the production, and that it was the article she felt most the want of; I therefore hastened to communicate the news to her, and she expressed the liveliest joy: "This," said she, "is the most useful thing you have found; lose not a moment in searching for more of these leaves, and bring me the most you can of them; I will make you stockings, shirts, clothes, thread, ropes—in short, give me flax, looms, and frames, and I shall be at no loss in the employment of it." Fritz whispered a word in Jack's ear; both went to the stable, and without asking my leave, one mounted

Lightfoot, the other the buffalo, and galloped off towards the wood so fast that I had no time to call them back: they were already out of sight; their eagerness to oblige their mother in this instance pleaded their forgiveness, and I suffered them to go on without following them, purposing to proceed and bring them back if they did not soon return.

In a quarter of an hour our deserters had foraged the woods, and heavily loaded their cattle with the precious plant, which, upon their return, they threw at their mother's feet with joyful shouts. It was next proposed that all should assist her in preparations for the work she was to engage in, and first in steeping the flax.

Fritz. How is flax prepared, father, and what is meant by steeping it?

Father. Steeping flax, or hemp, is exposing it in the open air, by spreading it on the ground to receive the rain, the wind, and the dew, in order in a certain degree to soften the plant; by this means the woody parts of the flax are separated with more ease from the fibrous; a kind of vegetable glue that binds them is dissolved, and it can then be perfectly cleaned

with great ease, and the parts selected which are fit for spinning.

Fritz. But may not the natural texture of this part be destroyed by exposing it so long to wet?

Father. That certainly may happen when it is managed badly and the flax not duly turned; the risk, however, is not great, the fibrous part has a peculiar tenacity, which enables it to resist longer the action of water; flax may be even steeped altogether in water without injury. Many think this the best and quickest method, and I am of their opinion.

My wife agreed with me; she therefore proposed to soak the flax in Flamingo Marsh, and to begin by making up the leaves in bundles, as they do hemp in Europe. We agreed to her proposal, and joined in this preparation of the flax during the rest of the day.

Next morning the ass was put to the small light car, loaded with bundles of leaves; Francis and the monkey sat on them, and the remainder of the family gayly followed with shovels and pick-axes. We stopped at the marsh, divided our large bundles into smaller which we placed in the water, pressing them down with stones, and leaving them in this

state till it was time to remove and set them in the sun to dry, and thus render the stems soft and easy to peel. In the course of this work we noticed the instinct of the flamingoes, in building their cone-shaped nests above the level of the marsh, each nest having a recess in the upper part, in which the eggs are securely placed, while the female manages to sit with her legs in the water: the nest is of clay, closely cemented, so as to resist all danger from the element till the young can swim.

In a fortnight we took the flax out of the water, and spread it on the grass in the sun, where it dried so rapidly that we were able to load it on our cart the same evening, and carry it to Falcon's Stream, where it was put by till we had time to make the beetles, wheels, reels, carding-combs, &c., required for the manufacture. It was thought best to reserve this task for the rainy season, and to employ the present time in collecting a competent stock of provisions for ourselves and for all the animals. Occasional slight showers had already come on: the temperature, which hitherto had been warm and serene, became gloomy and variable; the sky was often darkened with clouds, the stormy winds were heard, and

warned us to avail ourselves of the favourable moment to get all that might be wanted ready.

Our first care was to dig up a full supply of potatoes and yams for bread, with plenty of cocoanuts, and some bags of sweet acorns. It occurred to us while digging, that the ground being thus opened and manured with the leaves of plants, we might sow in it to advantage the remainder of our European corn. Notwithstanding all the delicacies this stranger land afforded us, the force of habit still caused us to long for the bread we had been fed with from childhood: we had not yet laid ourselves out for regular tillage; for this time, therefore, we committed it to the earth with little preparation; the season, however, was proper for sowing and planting, as the ensuing rain would moisten and swell the grain, which otherwise would perish in a burning soil. We accordingly hastened the planting of the various palm-trees we had found in our excursions at Tent-House, carefully choosing the smallest and the youngest. We formed around a large plantation of sugar-canes, so as to have hereafter every thing useful and agreeable around us.

These different occupations kept us several

weeks; our cart was incessantly in motion, carrying home our winter stock.

Unfortunately, the weather changed sooner than we had expected, and than, with all our care, we could be prepared for. The first thing, therefore, to be done, was to remove our abode, and to fix our residence at the bottom of the tree, between the roots and under the tarred roof I had made; for it was no longer possible to remain above, on account of the furious winds that threatened to bear us away, and wet our beds with rain through the large opening in front, our only protection here being a piece of sail-cloth, which was soon dripping wet, and rent to pieces. In this condition we were forced to take down our hammocks, mattresses, and every article that could be injured by the rain; and most fortunate did we deem ourselves in having made the winding stairs, which sheltered us during the removal. The stairs served afterward for a kind of lumber-room. Our little sheds between the roots, constructed for the poultry and the cattle, could scarcely contain us all; and the first days we passed in this manner were painful, crowded all together, and hardly able to move in these almost dark recesses.

which the fetid smell from the close adjoining animals rendered almost insupportable: in addition, we were half-stifled with smoke when ever we kindled a fire, and drenched with rain when we opened the doors. For the first time since our disaster, we sighed for the comfortable houses of our dear country: but what was to be done? we were not there, and losing our courage and our temper would only increase the evil. I strove to raise the spirits of my companions, and obviate some of the inconveniences. The winding stair was, as I have said, very useful to us; the upper part of it was filled with numerous articles that gave us room below; and as it was lighted and sheltered by windows, my wife often worked there, seated on a stair, with her little Francis at her feet. We confined our live-stock to a smaller number, and gave them a freer current of air, dismissing from the stalls those animals that from their properties, and being natives of the country, would be at no loss in providing for themselves. That we might not lose them altogether, we tied bells round their necks; Fritz and I sought and drove them in every evening that they did not return. We generally got wet to the skin and chilled with cold

during the employment, which induced my wife to contrive for us a kind of clothing more suitable to the occasion; she took two seamen's shirts from the chest, and with some pieces of old coats, she made us a kind of cloth hoods joined together at the back, and well formed for covering the head entirely: we melted some elastic gum, which we spread over the shirts and hoods; and the articles thus prepared answered every purpose of water-proof overalls, that were of great use and comfort to us.

As to the smoke, our only remedy was to open the door when we made a fire; and we did without as much as we could, living on milk and cheese, and never making a fire but to bake our cakes: we then used the occasion to boil a quantity of potatoes and salt meat, enough to last us a number of days. Our dry wood was also nearly gone, and we thanked Heaven the weather was not very cold; for had this been the case, our other trials would have much increased. A more serious concern was, our not having provided sufficient hay and leaves for our European cattle, which we kept housed to avoid losing them; the cow, the ass, the sheep, and the

goat, the last two of which were increased in number, required a large quantity of food, so that we were ere long forced to give them our potatoes and sweet acorns; which, by-the-by, they found very palatable, and we remarked that they gave a delicate flavour to their milk; the cow, the goats, and even the sheep, amply supplied us with that precious article. The gloom of the atmosphere and our low windowless habitation sensibly shortened our daylight; fortunately we had laid in a huge store of candles, and felt no want of that article: when darkness obliged us to light up, we got round the table, where a large taper fixed on a gourd gave us an excellent light, which enabled my wife to pursue her occupation with the needle; while I on my part was forming a journal, and writing what the reader has perused of the narrative of our shipwreck and residence in this island, assisted from time to time by my sons and their mother, who did not cease to remind me of various incidents belonging to the story. To Ernest, who wrote a fine hand, was intrusted the care of writing off my pages in a clear character: Fritz and Jack amused themselves by drawing from memory the plants and ani-

nals which had most struck their observation: while one and all contributed to teach little Francis to read and write: we concluded the day with reading in the Holy Bible, performed by each in turn, and we then retired to rest, happy in ourselves, and in the peaceful course of our existence. Our kind and faithful steward often surprised us agreeably on our return from looking after the cattle, by lighting a fagot of dried bamboo, and quickly roasting by the clear heat it produced a chicken, pigeon, or duck, from our poultry-yard; or some of the thrushes we had preserved in butter, which were excellent. Every four or five days she made us new fresh butter in the gourd-churn; and this, with some fragrant honey spread on our manioc cakes, formed a treat that would have raised the envy of European epicures.

The fragments of our meals belonged in right to our domestic animals, as part of the family. We had now four dogs, the eagle, and the monkey, to feed; they relied with just confidence on the kindness of their respective masters, who certainly would have deprived themselves to supply the wants of their helpless dependants. Francis had taken

under his protection the two puppies; my wife, Flora; and I, the brave Turk: thus each had his attendant, of which he took care, and no one was dispensed from the offices of tenderness and vigilance. If the buffalo, the onagra, and pig, had not found sustenance abroad, they must have been killed or starved, and that would have given us much pain. In the course of these discomforts, it was resolved that we would not pass another rainy season exposed to the same evils: even my gentle-tempered wife was a little ruffled now and then with our situation, and insisted more than any of us on the plan of building elsewhere a more spacious winter house: she wished, however, to return to our castle in the tree every summer, and we all joined with her in that desire. The choice of a fresh abode was now talked of, and Fritz in the midst of consultation came forward with a book he had found in the bottom of our clothes' chest. "Here," said he, "is a good counsellor and model, *Robinson Crusoe*, since Heaven has destined us to a similar fate, whom better can we consult? As far as I remember, he cut himself a habitation out of he solid rock: let us see how he proceeded.

we will do the same, and with greater ease, for he was alone; we are six in number, and four of us able to work." This idea of Fritz was hailed by all. We assembled, and read the famous history with an ardent interest; it seemed, though so familiar, quite new to us; we entered earnestly into every detail, and derived considerable information from it, and never failed to feel lively gratitude towards God, who had rescued us all together, and not permitted one only of us to be cast, a solitary being, on the island.

Francis expressed his wish to have a *Man Friday;* Fritz thought it better to be without such a companion, and to have no savages to contend with. Jack was for the savages, warfare, and encounters. The final result of our deliberations was, to go and survey the rocks round Tent House, and to examine whether any of them could be hollowed out for our purpose.

Our last job for the winter, undertaken at my wife's request, was a beetle for her flax, and some carding combs. I filed large nails till they were even, round, and pointed; I fixed them at equal distances in a sheet of tin, and raised the sides of it like a box: I

then poured melted lead between the nails and the sides, to give firmness to their points, which came out four inches. I nailed this tin on a board, and the machine was fit for work.

CHAPTER XXIX.

Spring—Spinning—Salt Mine

I CAN hardly describe our joy, when, after many gloomy weeks of rain, the sky began to brighten, the sun to dart its rays on the moist earth, the winds to be lulled, and the state of the air became mild and serene. We issued from our dreary hovels with joyful shouts, and walked round our habitation breathing the balmy air, while our eyes were pleased with the beauteous verdure beginning to shoot forth on every side. Nature again opened her arms, every creature seemed reanimated. We rapidly forgot the weary hours of the wet season, and with hopeful hearts looked forward to the toils of summer as pleasant amusements.

Our plantation trees were rapidly advancing;

the seed we had thrown into the ground was sprouting in slender blades that waved luxuriantly; a pleasing tender foliage adorned the trees; the earth was covered with a great variety of flowers, whose agreeable tints diversified the verdure of the meadows. The song of birds was heard around; they were seen between the leaves, joyfully fluttering from branch to branch; their various forms heightened this delightful picture of spring, and we were at once struck with wonder and with gratitude towards the Creator of so many beauties. Under these impressions we celebrated the next Sunday in the open air; and, if possible, with stronger emotions of piety than heretofore. The blessings which surrounded us were ample compensation for some uneasy moments which had occasionally intervened; and our hearts, filled with fresh zeal, were resolved to be resigned, if it should be the will of God, to pass the residue of our days in this solitude. The force of paternal feelings, no doubt, made me sometimes form other wishes for my children; but these I buried in my own breast: but if I secretly indulged a desire for some event that might prolong and even increase their happiness,

I nevertheless wholly submitted all to the Divine will.

Our summer labours commenced by arranging and cleaning Falcon's Nest, the order and neatness of which the rain and leaves blown by the wind had disturbed; and in a few days we rendered it fit for our reception; the stairs were cleared, the rooms between the roots reoccupied, and we were left with leisure to proceed to other employments. My wife lost not a moment in resuming the working of her flax. Our sons hastened to lead the cattle to the fresh pastures: while it was my task to carry the bundles of flax into the open air, where, by heaping stones together, I contrived an oven sufficiently commodious to dry it well. The same evening we all set to work to peel, and afterward to beat it and strip off the bark; and lastly to comb it with my carding machine, which fully answered the purpose. I then commenced making a wheel without delay, that she might enter upon her favourite work.

At an earlier period of my life I had practised turnery for my amusement; now, however, I was destitute of the requisite tools; but as I had not forgotten the arrangement

and parts of a spinning-wheel and reel, I found means to accomplish those two machines to her satisfaction; and she fell so eagerly to spinning as to allow herself no leisure even for a walk, and scarcely time to dress our dinners: nothing so much delighted her as to be left with her little boy, whom she employed to reel as fast as she could spin, and sometimes the other three were also engaged in turns at the wheel, to forward her business while she was occupied in other offices; but not one of them was found so tractable as the quiet Ernest, who preferred this to more laborious work. Our first visit was to Tent House, and here we found the ravages of winter more considerable than even at Falcon's Stream: the tempest and rain had beaten down the tent, carried away a part of the sail-cloth, and made such havoc among our provisions, that by far the largest portion was spotted with mildew, and the remainder could be only saved by drying them instantly. Luckily, our handsome pinnace had been for the most part spared; it was still at anchor, ready to serve us in case of need; but our tub-boat was in too shattered a state to be of any further service.

In looking over the stores, we were grieved to find the gunpowder, of which I had left three barrels in the tent, the most damaged. The contents of two were rendered wholly useless. I thought myself fortunate in finding the remaining one in tolerable condition.

Fritz and Jack were constant in their endeavours to make me undertake the excavation in the rock, but I had no hopes of success. Robinson Crusoe found a spacious cavern that merely required arrangement: no such cavity was apparent in our rock, which bore the aspect of extreme solidity; so that with our limited powers, three or four summers would scarcely suffice to execute the design. Still the earnest desire of a more substantial habitation to defend us from the elements perplexed me, and I resolved to make at least the attempt of cutting out a hole that should protect the gunpowder, the most valuable of all our treasures. I accordingly set off one day, accompanied by my two boys, leaving their mother at her spinning with Ernest and Francis. We took with us pickaxes, chisels, hammers, and iron levers, to try what impression we could make on the rock. I marked out with charcoal the opening we wished to make, and we

began the heavy toil of piercing the quarry. We made so little progress the first day, that, in spite of our courage, we were tempted to relinquish the undertaking; we persevered, however, and my hope was somewhat revived as I perceived the stone was of a softer texture as we went deeper: I concluded from this that the ardent rays of the sun striking upon the rock had hardened the outside layer, and that the stone within would increase in softness as we advanced. When I had cut about a foot in depth we could loosen it with a spade like dried mud; this determined me to proceed with double ardour, and my boys assisted me with a spirit and zeal beyond their years.

After a few days of labour, we measured the opening, and found we had already advanced seven feet into the rock. Fritz removed the fragments in a wheelbarrow, and discharged them in a line before the place, to form a sort of terrace; I applied my own labour to the upper part to enlarge the hole; Jack, the smallest of the three, was able to get in and cut away below. He had with him a long iron bar sharpened at the end, which he drove in with a hammer to loosen a piece at a time; suddenly he bawled out, "It is pierced

through, father! Fritz, I have pierced it through!"

"Hah, hah, master Jack at his jokes again! But let us hear, what have you pierced? Is it the mountain? Not your hand or foot, Jack?" cried I.

Jack. No, no, it is the mountain (the rocks resounding with his usual shout of joy); huzza, huzza! I have pierced the mountain!

Fritz now ran to him. "Come, let us see, then: it is no doubt the globe at least you have pierced," said he, in a bantering tone: "you should have pushed on your tool boldly, till you reached Europe, which I suppose is under our feet; I should have been glad to peep into that hole."

Jack. Well, then, peep you may, but I hardly know what you will see; come and look how far the iron is gone in, and tell me if it is all my boasting.

"Come hither, father," said Fritz; "this is really strange: his iron bar seems to have got to a hollow place; see, it can be moved in every direction." I approached, thinking the incident worth attention: I took hold of the bar, which was still in the rock, and working it about, I made a sufficient hole for one of my

sons to pass, and I observed that in reality the rubbish fell within the cavity, which I judged from the falling of the stones was not much deeper than the part we stood on. My two lads offered to go in together and examine it: this, however, I forbade. I even made them remove from the opening, as I smelt the mephitic air that issued from it, and began myself to feel giddiness in consequence of having gone too near; so that I was com pelled to withdraw quickly, and breathe a purer air. "Beware, my dear children," said I, in terror, "of entering such places, for the loss of life might be the consequence."

Jack. How can that be, father?

Father. Because the air is mephitic, that is, foul, and therefore unfit for breathing in.

Jack. How does air become mephitic?

Father. In different ways: for example, when it is full of noxious vapours, or when it contains too many inflammable particles, or when it is too heavy or dense, as fixed air is; but in general, when it merely loses its elasticity, it no longer passes freely into the lungs; respiration is then stopped, and suffocation speedily ensues, because air is indispensable o life and the circulation of the blood.

Jack. Then all to be done is, to be off quickly when one feels a stoppage of breath.

Father. This is certainly the natural course, when it can be taken; but the attack usually begins by a dizziness of the head, so violent as to stop motion, which is followed by great oppression; efforts are made to breathe, fainting follows, and without speedy help a sudden death takes place.

Fritz. What assistance can be administered?

Father. The first thing to be done is to remove the person so affected to pure fresh air, and to throw cold water over his body; he must then be well dried, and afterward rubbed with warm cloths; vital air must be infused, or tobacco-smoke thrown up; in short, he must be treated like a drowned person till signs of life appear, which is not always the result.

Fritz. But why do you think, father, the air in this cavern is mephitic, as you term it, or dangerous to breathe in?

Father. All air confined and wholly separated from that of the atmosphere gradually loses its elasticity, and can no longer pass through the lungs: in this state it generates

injurious qualities that interrupt the process of breathing. It is in this act that the atmospheric air diffused around us unites intimately with the blood, to which it communicates one of its most essential parts, called vital air, for without it life cannot be supported.

Fritz. And by what is good air known? How judge that one may breathe freely at a few paces from this mephitic cave?

Father. This becomes evident when inspiration and expiration are performed with ease; besides, there is a test,—fire does not burn in foul air, yet it is made the means of correcting it. We must light a fire of sufficient strength in this hole to purify the air within, and render it friendly to respiration: at first the bad air will extinguish the fire, but by degrees the fire in its turn will expel the bad air and burn freely.

Fritz. Oh! that will be an easy matter.

The boys now hastened to gather some dry moss, which they made into bundles; they then struck a light and set fire to them, and threw the moss blazing into the opening; but, as I had described, the fire was extinguished at the very entrance, thus proving that the air within was highly mephitic. I now saw

that it was to be corrected by another and more effectual method; I recollected that we had brought from the vessel a chest that was full of grenades, rockets, and other fireworks, which had been shipped for the purpose of making signals, as well as for amusement. I sought it hastily, and took some of these, together with an iron mortar for throwing; out of it I laid a train of gunpowder, and set fire to the end which reached to where we stood: a general explosion took place; the lighted grenades flew about on all sides like brilliant meteors, and bursting with a terrific sound. We then sent in the rockets, which had also a full effect. They hissed in the cavity like flying dragons. We beheld too, as we thought, numerous dazzling bodies, that sparkled suddenly, as if by magic, and disappeared with the rapidity of lightning, leaving the place in total darkness. A squib bursting in the form of a star presented a spectacle we wished to be prolonged. On its separating, a crowd of little winged genii came forth, each holding a small lighted lamp, and the whole fluttering in every direction: every thing in the cavern shone brilliantly, and offered a truly enchant

ing sight; but they dropped in succession, fell to the ground without noise, and vanished.

After having played off our fireworks, I tried lighted straw: to our great satisfaction, the bundles thrown in were entirely consumed; we could then reasonably hope nothing was to be feared from the air: but there still remained the danger of plunging into some hole, or of meeting with a body of water. From these considerations, I deemed it more prudent to defer our entrance into this unknown recess, till we had lights to guide us through it. I despatched Jack on the buffalo to Falcon's Stream, to tell his mother and brothers of our discovery, directing him to return with them, and bring all the tapers that were left: my intention was to tie them together to the end of a stick, and proceed with it lighted to examine the cavity. I had not sent Jack without a meaning; the boy possessed from nature a lively imagination: I knew he would tell his mother such wonders of the fireworks, and all they had brought to our view, that he would induce her to accompany him without delay, and bring us lights to penetrate the rock.

Jack, overjoyed, sprang on the buffalo, gayly smacked his whip, and set off so boldly that I almost trembled for his safety. The intrepid boy made a complete race-horse of his horned Bucephalus.

In three or four hours we saw them coming up in our car of state, which was now drawn by the cow and the ass, and conducted by Ernest. Francis too played his part, and contended with his brother for the ropes that served as reins. Jack, mounted on his buffalo, came prancing before them; blew through his closed hand, in imitation of the French horn, and now and then whipped the ass and cow to quicken their motion. When they had crossed Family Bridge, he came forward on the gallop; and when he got to us, jumped off the beast, shook himself, took two or three springs from the ground, and thus refreshed, ran up to the car to hand his mother out.

I immediately lighted some of the tapers; but not together, as I had intended; I preferred each taking one in his right hand, an implement in his left, another taper in his pocket, flint and steel; and thus we entered the rock in solemn procession. I took the lead, my sons followed me, and their beloved

mother, with the youngest, brought up the rear. The interest and curiosity she felt were not without tender apprehensions; and indeed I felt myself that sort of fear which an unknown object is apt to excite; even our dogs that accompanied us betrayed some timidity, and did not run before as usual; but we had scarcely advanced four paces within the grotto, when all was changed to more than admiration and surprise. The most beautiful spectacle presented itself. The sides of the cavern sparkled like diamonds, the light from our six tapers was reflected from all parts, and had the effect of a grand illumination. Crystals of every length and shape hung from the top of the vault; which, uniting with those of the sides, formed pillars, altars, and a variety of other figures, composing the most splendid masses. We might have fancied ourselves in the palace of a fairy, or an illumined temple. In some places all the colours of the rainbow were sent from the angles of the crystals, and gave them the appearance of the finest precious stones.

The astonishment of my family was so great as to be almost ludicrous; they were all in a kind of dumb stupor half imagining it

was a dream. For my own part, I had read the description of the famous grotto of Antiparos; my sensations, therefore, were not the same. The bottom was level, covered with a white and very fine sand, as if purposely strewed, and so dry that I could not see the least mark of water anywhere. All this led me to hope the spot would be healthy, convenient, and fit for our proposed residence. I now formed a particular conjecture as to the nature of the crystals shooting out on all sides, and especially from the arch-roof. They could scarcely be of that species of rock-crystals produced by the slow filtering of water falling in drops, and seldom found in excavations exhibiting so dry a nature, nor ever with so many of the crystals perpendicular and perfectly smooth. I was impatient to evince the truth or falsehood of this idea by an experiment, and discovered with great joy, on breaking a portion of one of them, that I was in a grotto of *sal gem*, that is, rock-salt, found in the earth in solid crystallized masses, generally above a bed of spar or gypsum, and surrounded by layers of fossils or rock. The discovery of this fact, which no longer admitted a doubt, pleased us all exceedingly. The

shape of the crystals, their little solidity, and finally their saline taste, were decisive evidences.

How highly advantageous to us and our cattle was this superabundance of salt, pure and ready to be shovelled out for use, and preferable in all respects to what we collected on the shore, which required to be refined! As we advanced in the grotto, remarkable figures formed by the saline matter everywhere presented themselves; columns reaching from the bottom to the top of the vault appeared to sustain it; and some even had cornices and capitals. From the variety of forms we beheld, fancy might make a thousand creations at its pleasure: windows, large open cupboards, benches, church ornaments, figures of men and animals; some like polished crystals or diamonds, others like blocks of alabaster.

We viewed these wonders with curiosity, and we had all lighted our second taper, when I observed on the ground in some places a number of crystal fragments that seemed to have fallen off from the upper part. Such a separation might recur, and expose us to danger; a piece falling on any of our heads might prove

instantly fatal. But on closer inspection, I was convinced they had not dropped of themselves; the whole mass was too solid for fragments of that size to have been so detached from it; and had dampness loosened them they would have dissolved gradually: I concluded they were broken off by the explosion of our artillery and fireworks, and I thought it prudent to retire, as other loosened pieces might unexpectedly fall on us. I directed my wife and three of the children to place themselves in the entrance, while Fritz and I carefully examined every part that threatened danger. We loaded our guns with ball, and fired them into the centre of the cavern, to be more fully assured of what produced the separation of the former pieces; one or two more fell; the rest remained immoveable, though we went round with long poles, and struck all we could reach. We at length felt confident that in point of solidity there was nothing to fear, and that we might proceed without dread of accident. Many schemes were formed for converting this magnificent grotto into a convenient and agreeable abode. We had possession of the premises; the sole business was to turn them to the best account; and how to

effect this was our unceasing theme: some voted for our immediate establishment there, but they were opposed by more sagacious counsel, and it was resolved that Falcon's Stream should still be our head-quarters till the end of the year.

CHAPTER XXX.

House in the Salt Rock—Herring Fishery.

THE lucky discovery of a cavern in the rock had considerably lessened our labour: excavation was no longer requisite: I had more room than was wanted for the construction of our dwelling: to render it habitable was the present object, and to do this did not seem a difficult task. The upper bed of the rock, in front of the cavern, through which my little Jack had dug so easily, was of a soft nature, and to be worked with moderate effort. I hoped also that, being now exposed to the air and heat of the sun, it would become by degrees as hard and compact as the first layer that had given me so much trouble. From

this consideration I began, while it retained its soft state, to make openings for the doors and windows of the front. This I regulated by the measurement of those I had fixed in my winding staircase, which I had removed for the purpose of placing them in our winter tenement. Intending Falcon's Nest in future as a rural retreat for the hottest days of summer, the windows of the staircase became unnecessary; and as to the door, I preferred making one of bark similar to that of the tree itself, as it would the better conceal our abode, should we at any time experience invasion from savages or other enemies: the door and windows were therefore taken to Tent House, and to be hereafter fixed in the rock. I had previously marked out the openings to be cut for the frames, which were received into grooves for greater convenience and solidity. I took care not to break the stone taken from the apertures, or at least to preserve it in large pieces, and these I cut with the saw and chisel into oblongs an inch and a half in thickness, to serve as tiles. I laid them in the sun, and was gratified in seeing them harden quickly; I then removed them, and my sons placed them in order against the

side of the rock, till they were wanted for our internal arrangements.

When I could enter the cavern freely with a good door-way, and it was sufficiently lighted by the windows, I erected a partition for the distribution of our apartments and other conveniences. The extent of the place afforded ample room for my design, and even allowed me to leave several spaces in which salt and other articles could be stored. At the request of my children, I was cautious to injure as little as possible the natural beauties of this new family mansion; but with all my care, I could not avoid destroying them in the division allotted to the stables: cattle are fond of salt, and would not have failed to eat away these ornaments, and perhaps in a prejudicial quantity: however, to gratify and reward my children, I preserved the finest of the pillars, and the most beautiful pieces to decorate our saloon. The large ones served us for chairs and tables. I laid out the interior in the following manner:—a very considerable space was first partitioned off in two divisions; the one on the right was to be our residence; that on the left was to contain the kitchen, stables, and work-room. At the end

of the second division, where windows could not be placed, the cellar and store-room were to be formed; the whole separated by partition-boards, with doors of communication, so as to give us a pleasant and comfortable abode. Favoured so unexpectedly by what nature had already done of the necessary labour, we were far from repining ungratefully at what remained to be done, and entertained full hope of completing the undertaking, or at least the chief parts, before winter.

The side we designed to lodge in was divided into three apartments; the first, next the door, was the bed-room for my wife and me, the second a dining-parlour, and the last a bed-room for the boys: as we had only three windows, we put one in each sleeping-room; the third was fixed in the kitchen, where my wife would often be. A grating for the present fell to the lot of our dining-room, which, when too cold, was to be exchanged for one of the other apartments. I contrived a good fireplace in the kitchen, near the window; I pierced the rock a little above, and four planks nailed together, and passing through this opening, answered the purpose

of a chimney. We made the work-room near the kitchen of sufficient dimensions for the performance of undertakings of some magnitude; it served also to keep our cart and sledge in: lastly, the stables, which were formed into four compartments to separate the different species of animals, occupied all the bottom of the cavern on this side; on the other were the cellar and magazine.

It is readily imagined, that a plan of this extent was not to be executed as if by enchantment, and that we satisfied ourselves in the first instance with doing what was most urgent, reserving the residue for winter; yet every day forwarded the business more than we had been aware of. On every excursion, we brought something from Falcon's Stream, that found its place in the new house, where we deposited likewise, in safety, the remaining provisions from the tent.

The long stay we made at Tent House during these employments, furnished us an opportunity of perceiving several advantages we had not reckoned upon. Large turtles were often seen on the shore, where they placed their eggs in the sand, and they regaled us with a rich treat; but, extending our

wishes, we thought of getting possession of the turtles themselves for live stock, and of feasting on them whenever we pleased. As soon as we saw one on the sands, one of my boys was started to cut off its retreat; mean while we approached the animal, and quietly, without doing it any injury, turned it on its back, then passed a long cord through the shell, and tied the end of it to a stake, which we fixed close to the edge of the water. This done, we set the prisoner on his legs again; it hastened into the sea, but could not go beyond the end of the cord; apparently it was all the happier, finding food with more facility along shore than out at sea; and we enjoyed the idea of being able to take it when wanted. The large lobsters, whose flesh was tough and coarse, were given to the dogs, who preferred them to potatoes; but we shortly after became possessors of another excellent winter provision, which chance unexpectedly procured us.

One morning, when near Safety Bay, a singular sort of spectacle presented itself. At some distance from the shore an extensive surface of the water seemed boiling, as if heated by a fire: it swelled, foamed like boil-

ing water: a large number of birds hovered over it, sometimes they darted along the surface of the water, sometimes rose in the air, flying in a circle, pursuing each other in every direction; we were at a loss to judge whether pleasure or warfare produced their motions.

My wife and the boys stood for a long time and indulged themselves in various conjectures concerning it, till I at last informed them that the moveable bank before us was neither more nor less than a shoal of herrings about to enter Safety Bay, and fall into our hands. All now had questions without end to propose about their appearing in such numbers, and I answered, that at a certain season, herrings leave the Frozen Sea together in a heap. They swim so close to each other, and occupy such a space, as to appear like a bank or island of sand, several leagues in breadth, some fathoms deep, and sometimes above a hundred miles long. They afterward divide into bodies, directing their course to the coasts and bays, where they spawn, that is, leave their eggs among the stones and sea-plants, and to these spots fishermen from all parts go to catch them. The herrings

appear eager to reach those parts where the tide is lowest, to escape the voracity of the large fishes which pursue them, by getting into shallow water; but in doing this, they become an easier prey to the birds and to man. Exposed to destruction in so many ways, one might wonder the species is not extinct, if nature had not provided against these accidents by their astonishing fecundity: 68,656 eggs have been found in a moderate-sized female: thus they continue undiminished, notwithstanding the vast numbers which are destroyed.

By this time the shoal of herrings had reached the entrance of our bay. They made a loud rustling noise in the water, leaping over each other, and displaying their scales of silver hue. This accounted for the sparks we had seen emitted from the sea, and which we could not previously explain. We had no time for further contemplation, but hastened to unharness our team and supply the want of nets with our hands in catching the herrings: the boys used the largest gourds instead of pails, which were no sooner dipped in than filled; and we should have been at a loss where to stow them, had I not thought

of employing the condemned boat of tubs. It was accordingly drawn to the water's edge by the buffalo, and placed on rollers. My wife and the two youngest lads cleaned it, while the other two went to the cavern for salt, and I quickly fitted up a sort of tent of sail-cloth on the strand, so as to keep off the rays of the sun while we were busied in salting. We then all engaged in the task, and I allotted to each a share adequate to his strength and skill. Fritz took his station in the water, to bring us the herrings as fast as caught. Ernest and Jack cleaned them with knives; their mother pounded the salt; Francis helped all, and I placed them in the tubs as I had seen done in Europe; while a joyous shout declared the general activity. I put a layer of salt at the bottom of the barrel, then of fish, the heads towards the staves, proceeding thus till my tubs were nearly full: I spread over the last layer of salt large palm-tree leaves, on these a piece of sail-cloth, and fitted in two half-rounded planks for a heading, which I pressed down with stones. This effected, I put the buffalo and the ass to the cart again, and conveyed it to our cool cellar in the rock. In a few days, when the herrings were sunk,

I closed the barrels more accurately by means of a coating of clay and flax over the cloth, which kept out air and moisture completely, and secured us an excellent food for winter.

Scarcely had we finished our salting, when another novelty occurred: a number of sea-dogs came into the bay and river, that had followed the herrings with their utmost greediness, sporting in the water along-shore, without any fear of us. The fish presented no attraction to the palate, but its skin, tanned and dressed, makes excellent leather. I was in great need of it for straps and harness, to make saddles for Fritz and Jack to ride the onagra and buffalo, and, in short, for our own use to cut up into soles, belts, and pantaloons, of which articles we much wanted a fresh supply: besides, I knew the fat yielded good lamp-oil, that might be substituted for tapers in the long evenings of winter; and that it would be further useful in tanning and rendering the leather pliant.

We had the good fortune to be again successful, and in a short time we secured a sufficient number of them, and carefully preserved the fat, of which we collected a large quantity; it was first put into a copper, melted

and cleansed properly, then poured into casks, and kept for the tan-house and lamp. When time should allow, I purposed making soap with it, and this design excited my wife's zeal in the unpleasant though ultimately useful task we were engaged in. We also took care of the bladders, which are very large, for the purpose of holding liquids; the remaining parts that could not be turned to account were thrown into the river.

At this time I likewise made some improvements in our sledge, to facilitate the carrying of stores from Falcon's Stream to our dwelling in the rock at Tent House. I raised it on two beams, on axle-trees, at the extremities of which I put on the four gun-carriage wheels I had taken off the cannon from the vessel; by this alteration I obtained a light and convenient carriage of moderate height, on which boxes and casks could be placed. Pleased with the operations of the week, we set out all together with cheerful hearts for Falcon's Stream, to pass our Sunday there, and once more offer our pious thanks to the Almighty, for all the benefits he had bestowed upon his defenceless creatures.

CHAPTER XXXI.

New Fishery—New Experiments—New Discoveries, and House.

The enterprise of our dwelling went on; but though we advanced with only moderate rapidity, the progress was such as to afford the hope of our being settled within it by the time of the rainy season.

From the moment I discovered a kind of stone called gypsum in our grotto, I foresaw some great advantages I should derive from it; but to avoid enlarging the dimensions of our house by digging farther, I tried to find a place in the continuation of the rock which I might be able to blow up: I had soon the good fortune to meet with a narrow slip between the projections of the rock, which I could easily, by the means I proposed, convert into a passage that should terminate in our work-room. I found also on the ground a quantity of fragments of gypsum, and removed a great number of them to the kitchen, where

we did not fail to bake a few of the pieces at a time when we made a fire for cooking, which, thus calcined, rubbed into a powder when cold: we obtained a considerable quantity of it, which I put carefully into casks for use, when the time should come for finishing the interior of our dwelling. My notion was, to form the walls for separating the apartments with the squares of stone I had already provided, and to unite them together with a cement of this new ingredient, which would be the means both of sparing the timber, and increasing the beauty and solidity of the work.

It is almost incredible the immense quantity of plaster we had in a short time amassed; the boys were in a constant state of wonder as they looked at the heap. I seized the opportunity of imprinting on their minds the value of a firm and steady perseverance in an object once engaged in, the reward of which they now so agreeably experienced. "When we first cast our eyes," continued I, "on this rock, how little did we conceive it possible to transform it into a comfortable dwelling-place; yet we have not only in our persons sufficed for carpenters and masons, but even plasterers

too; and so effectually, that, if we had it much at heart, we might adorn our walls with stucco, as is the mode in Europe."

The first use I made of the plaster was to complete some covers I had begun with other materials for my herring-tubs, four of which I stopped down to render them impenetrable to the air; the rest of the herrings we intended to dry and smoke. For this purpose we erected a little sort of hut of reeds and branches, as is practised in Holland and America by the fishermen: we placed rows of sticks, reaching from side to side, across the hut, laid the herrings upon them, and then lighted a heap composed of moss and fresh-cut branches of trees, to produce a stronger and more effective vapour for the purpose: we made the door tight, and had soon the pleasure of adding a large stock of dried herrings to our former store for the ensuing winter.

About a month after the singular visit of the herrings, which had now entirely left our shores, we received another, and not a less profitable one, from a fish of a different species.

As Jack and I were walking near the mouth of the river, we saw immense quantities of a large fish moving slowly towards the banks.

As they came nearer, I distinguished the largest to be sturgeons by the pointed snout, while the smallest I pronounced to be salmon. "What say you now, father?" said Jack; "this is nothing like your little herrings! A single fish of this troop would fill a tub!"—"No doubt," answered I: and with great gravity I added,—"Prithee, Jack, step into the river, and fling them to me one by one, that I may take them home to salt and dry."

He looked at me for a moment with a sort of vacant doubt if I could possibly be in earnest; then seizing suddenly a new idea, "Wait a moment, father," cried he, "and I will do so:" and he sprang off like lightning towards the cavern, from whence he soon returned loaded with a bow and arrows, the bladders of the sea-dogs, and a ball of string to catch, as he assured me, every one of the fishes. I looked on with interest and curiosity to mark what was next to happen, while the animation of his countenance, and the firm determination of his manner, afforded me the highest amusement. He tied the bladders round at certain distances with a long piece of string, to the end of which he fastened an arrow and a small iron hook; he placed the

large ball of string in a hole in the ground at a sufficient distance from the water's edge, and then he shot off an arrow, which the next instant stuck in one of the largest fishes. My young sportsman uttered a shout of joy. At the same moment Fritz joined us, and witnessed this feat without the least symptom of jealousy. "Well done, brother Jack," cried he, "but let me, too, have my turn." Saying this, he ran back and fetched the harpoon and the windlass, and returned to us accompanied by Ernest. We were well pleased with their arrival, for the salmon Jack had pierced struggled so fiercely, that all our endeavours to hold the string were insufficient, and we dreaded at every throw to see it break, and the animal make good its escape. By degrees, however, its strength was exhausted, and aided by Fritz and Ernest, we succeeded in drawing it to a bank, where I put an end to its existence.

This fortunate beginning of a plan for a fishery inspired us all with hope and emulation. Fritz eagerly seized his harpoon and windlass; I, for my part, like Neptune, wielded a trident; Ernest prepared the large fishing-rod; and Jack his arrow with the same appa-

ratus as before, not forgetting the bladders, which were so effectual in preventing the fish from sinking when struck. We were now more than ever sensible of our loss in the destruction of the tub-boat, with which we could have pursued the creature in the water, and have been spared much pains and difficulty; but, on the other hand, such numbers of fishes presented themselves at the mouth of the river, that we had only to choose among them. Jack's arrow, after missing twice, struck the third time a large sturgeon, which was so untractable that we had great difficulty in securing him. I, too, had caught two of the same fish, and had been obliged to go up to the middle in the water to manage my booty. Ernest, with his rod and line and a hook, had also taken two smaller ones. Fritz, with his harpoon, had struck a sturgeon at least eight feet in length, and the skill and strength of our whole company were found necessary to conduct him safe to shore, where we harnessed the buffalo to him with strong cords to draw him to Tent House.

Our first concern was to clean our fish thoroughly inside, to preserve them fresh the longer. I separated the eggs I found in them,

and which could not be less than thirty pounds, and put them aside to make a dish called caviar, greatly relished by the Russians and the Dutch. I took care also of the bladders, thinking it might be possible to make a glue from them, which would be useful for so many purposes. I advised my wife to boil some of the salmon in oil, similar to the manner of preparing tunny-fish in the Mediterranean: and while she was engaged in this process, I was at work upon the caviar and the glue. For the first, I washed the berries in several waters, and then pressed them closely in gourd-rinds, in which a certain number of holes had been bored. When the water had run off, the berries were taken out in a substance like cheese, which was then conveyed to the hut, to be dried and smoked. For the second, we cut the bladders into strips, which we fastened firmly by one end to a stake, and taking hold of the other with a pair of pincers, we turned them round and round till the strip was reduced to a kind of knot, and these were then placed in the sun to harden; this being the simple and only preparation necessary for obtaining glue from the ingredient. When thoroughly dry, a small

quantity is put on a slow fire to melt. We succeeded so well, and our glue was of so transparent a quality, that I could not help feeling the desire to manufacture some pieces large enough for panes to a window-frame.

When these various concerns were complete, we began to meditate a plan for constructing a small boat to come close in shore. I had a great desire to make it, as the savages do, of the rind of a tree; but the difficulty was to fix on one of sufficient size for my purpose; for though many were to be found in our vicinity, yet each was on some account or other of too much value to be spared. We therefore resolved to make a little excursion in pursuit of a proper tree, and in a situation where it was not likely to yield us fruit, or to refresh us with its shade.

In this expedition we as usual aimed at more than one object: eager as we were for new discoveries, we yet allowed ourselves the time to visit our different plantations and stores at Falcon's Stream. We were also desirous to secure a new supply of the wax-berry, of gourds, and of elastic gum. Our kitchen-garden at Tent House was in a fine condition; nothing could exceed the luxuriance of the vegetation, and,

almost without the trouble of cultivation, we had excellent roots and plants in abundance, which came in succession, and promised a rich supply of pease, beans of all sorts, lettuces, &c.; our principal labour was to give them water freely, that they might be fresh for use. We had, besides, melons and cucumbers in great plenty, which, during the hottest weather, we valued more than all the rest. We reaped a considerable quantity of Turkey wheat from the seed we had sown, and some of the ears were a foot in length. Our sugar-canes were also in the most prosperous condition, and one plantation of pine-apples on the high ground was also in progress to reward our labour with abundance of that delicious fruit.

This state of general prosperity at Tent House gave us the most flattering expectations from our nurseries at Falcon's Stream. Full of these hopes, we one day set out all together for our former abode.

We arrived at Falcon's Stream, where we intended to pass the night. We visited the ground my wife had so plentifully sowed with grain, which had sprung up with an almost incredible rapidity, and was now nearly ready for reaping. We cut down what was fairly

ripe, bound it together in bundles, and conveyed it to a place where it would be safe from the attacks of more expert grain-consumers than ourselves, of which thousands hovered round. We reaped barley, wheat, rye, oats, pease, millet, lentils—only a small quantity of each, it is true, but sufficient to enable us to sow again plentifully at the proper season. The plant that yielded the most was Indian corn, a proof that it best loved the soil. It had already shown itself in abundance in our garden at Tent House; but here there was a surface of land the size of an ordinary field entirely covered with its splendid golden ears, which still more than the other plants attracted the voracity of the feathered race. The moment we drew near, a dozen at least of large bustards sprang up with a loud rustling noise, which awakened the attention of the dogs; they plunged into the thickest parts, and routed numerous flocks of birds of all kinds and sizes, who took hastily to flight: among the fugitives were some quails, who escaped by running; and lastly, some kangaroos, whose prodigious leaps enabled them to elude the pursuit of the dogs.

We were so overcome by the surprise such

an assemblage of living creatures occasioned, as to forget the resource we had in our guns; we stood, as it were, stupid with amazement during the first moments, and before we came to ourselves the prey was beyond our reach, and for the most part out of sight. Fritz was the first to perceive and to feel with indignation the silly part we had been playing, and to consider in what way we could repair the mischief. Without further loss of time, he took the bandage from his eagle's eyes (for the bird accompanied him perched upon his game-bag), and showed him with his hand the bustards still flying, and at no great distance. The eagle took a rapid flight. Fritz jumped like lightning on the back of his onagra, and galloped over every thing that intervened in the direction the bird had taken, and we soon lost sight of him.

We now beheld a spectacle which in the highest degree excited our curiosity and interest: the eagle had soon his prey in view; he mounted above one of the bustards in a direct line, without losing sight of it for an instant, and then darted suddenly down; the bustards flew about in utter confusion, now seeking shelter in the bushes, then crossing

each other in every direction, in the attempt to evade the common enemy; but the eagle remained steady in pursuit of the bird he had fixed upon for his prey, and disregarded all the rest: he alighted on the unlucky bustard, fixed his claws and his beak in its back, till Fritz, arriving full gallop, got down from the onagra, replaced the bandage on the eagle's eyes, seated him once more upon the game-bag, and having relieved the poor bustard, he shouted to us to come and witness his triumph. We ran speedily to the place.

At the conclusion of this adventure, we hastened forward to Falcon's Stream, and dressed the wounds of the bustard. We perceived with pleasure that it was a male, and foresaw the advantage of giving him for a companion to our solitary female of the same species, which was completely tamed. I threw a few more bundles of maize into the cart, and without further delay we arrived at our tree, one and all sinking with faintness from hunger, thirst, and fatigue. It was on such occasions that my partner evinced the generosity of her temper: though necessarily more a sufferer than the rest, her first thought was always what she could administer to relieve us in the

shortest time. On this occasion, as we had consumed our little store of wine, and could not soon and easily procure milk from the cow, she contrived to bruise some of the maize between two large stones, and then put it in a linen cloth, and with all her strength squeezed out the sap; she then added some juice from the sugar-canes, and in a few minutes presented us with a draught of a cool liquid, invitingly white to the eye, and agreeable to the taste, which we received at her hands with feelings of grateful emotion.

The rest of the day was employed in picking the grains of the different sorts of corn from the stalks; we put what we wished to keep for sowing into some gourd-shells, and the Turkey wheat was laid aside in sheaves till we should have time to beat and separate it. Fritz observed that we should also want to grind it; and I reminded him of the hand-mill we had secured from the wrecked vessel.

Fritz. But, father, the hand-mill is so small, and so subject to be put out of order: why should we not contrive a water-mill, as they do in Europe? We have surely rapid streams of water in abundance.

Father. This is true; but such a mechan-

ism is more difficult than you imagine. The wheel alone, I conceive, would be an undertaking far beyond our strength or our capacity. I am, however, well pleased with the zeal which prompted your idea; and we will hereafter consider whether it may be worth while to bestow upon it further attention. We have abundance of time before us, for we shall not want a water-mill till our harvests are such as to produce plentiful crops of corn. In the mean time, let us be thinking of our proposed excursion for to-morrow; for we should set out, at least, by sunrise.

We began our preparations accordingly. My wife chose some hens and two fine cocks, with the intention of taking them with us, and leaving them at large to produce a colony of their species at a considerable distance from our dwelling-places: I, with the same view, visited our beasts, and selected four young pigs, four sheep, two kids, and one male of each species; our numbers having so much increased, that we could well afford to spare these individuals for the experiment. If we succeeded in thus accustoming them to the natural temperature and productions of our island, we should have eased ourselves of the

burden of their support, and should always be able to find them at pleasure.

The next morning, after loading the cart with all things necessary, not forgetting the rope-ladder and the portable tent, we quitted Falcon's Stream. The animals, with their legs tied, were all stationed in the cart. We left abundance of food for those that remained behind; the cow, the ass, and the buffalo were harnessed to the cart; and Fritz, mounted on his favourite, the onagra, pranced along before us, to ascertain the best and smoothest path for the party.

We took this time a new direction, which was straight forward between the rocks and the shore, that we might make ourselves acquainted with every thing contained in the island. In effect, the line proceeding from Falcon's Stream to Safety Bay, might be said to be the extent of our dominions: for as to the adjacent country of the buffaloes, Fritz and I had discovered that the passage to it by the end of the rocks was so dangerous, and at so great a distance, that we could not hope to live upon its soil, as we had done on our side of the rocks. We found, as usual, much difficulty in pushing through the tall tough

grass, and alternately through the thick prickly bushes which everywhere arose. We were often obliged to turn aside, while I cut a passage with my hatchet: but these accidents seldom failed to reward my toil by the discovery of different small additions to our general comfort; among others, some roots of trees curved by nature to serve both for saddles and yokes for our beasts of burden. I took care to secure several, and put them in the cart.

In about an hour we found ourselves at the end of the wood, and a small plain, or rather a grove of low bushes, to appearance almost covered with flakes of snow, lay extended before us. Little Francis was the first to call our attention to it, he being seated in the cart. "Look, father," cried he, "here is a place full of snow; let me get down and make some snow-balls." I could not resist a hearty laugh, though myself completely at a loss to explain the nature of what in colour and appearance bore so near a resemblance to it. Suddenly, however, a suspicion crossed my mind, and was soon confirmed by Fritz, who had darted forward on his onagra, and now returned with one hand filled with tufts of a most excellent

species of cotton, so that the whole surface of low bushes was in reality a plantation of that valuable article. This most useful of almost the whole range of vegetable productions bestowed by Providence on man, which, with the cost of only a little labour, supplies him with apparel, and commodious beds for the repose of his limbs, is found in such abundance in islands, that I had been surprised at not meeting with any before. The pods had burst from ripeness, and the winds had scattered around their contents; the ground was strewed with them, they had gathered in tufts on the bushes, and they floated gently in the air.

The joy of this discovery was almost too great for utterance, and was shared by all but Francis, who was sorry to lose his pretty snowballs; and his mother, to soothe his regret, promised him some new shirts and dresses; then turning to me, she begged I would construct a spinning-wheel, and then a loom for weaving. We ended with collecting as much cotton as our bags would hold, and my wife filled her pockets with the seed, to raise it in our garden at Tent House.

It was now time to proceed; and we took a direction towards a point of land which skirted

the wood of gourds, and, being high, commanded a view of the adjacent country. I conceived a wish to remove our establishment to the vicinity of the cotton plantation and the gourd wood, which furnished so many of the utensils for daily use throughout the family. I even thought it might be practicable to erect a sort of farm-house on the soil, which we might visit occasionally, and be welcomed by the agreeable sounds of the cackling of our feathered subjects, which would so forcibly remind us of the customs of our forsaken country.

We accordingly soon reached the high ground, which I found in all respects favourable to my design; behind, a thick forest gradually rose above us, which sheltered us from the north wind, and insensibly declined towards the south, ending in a plain clothed luxuriantly with grass, shrubs, and plants, and watered by a refreshing stream, which was a great advantage for our animals of every kind, as well as for ourselves.

My plan for a building was approved by all, and we lost no time in pitching our tent, and forming accommodations for cooking our victuals. When we had refreshed ourselves with a meal, I, for my part, resolved to look

about in all directions, that I might completely understand what we should have to depend upon in this place, in point of safety and general accommodation. I had also to find a tree that would suit for a boat; and lastly, to meet, if possible, with a group of trees, at such fit distances from each other as would assist me in my plan of erecting a farm-house. I was fortunate enough in no long time to find in this last respect exactly what I wanted, and quite near to the spot we on many accounts had felt to be so enviable. I returned to my companions, whom I found busily employed in preparing excellent beds of the cotton, upon which, at an earlier hour than usual, we all retired to rest.

CHAPTER XXXII.

Completion of two Farm-Houses—A Lake—The Beast with a Bill—A Boat.

THE trees that I had chosen for the construction of my farm-house, were for the most part one foot in diameter in the trunk·

they presented the form of a tolerably regular parallelogram, with its longest side to the sea, the length twenty-four feet, and the breadth sixteen. I cut little hollow places in the trunks, at the distance of ten feet, one above the other, to form two stories. The upper one I made a few inches shorter before than behind, that the roof might be in some degree shelving; I then inserted beams five inches in diameter respectively in the mortices, and thus formed the skeleton of my building. We next nailed some laths from tree to tree, at equal distances from each other, to form the roof, and placed on them, in order, a covering composed of pieces of the bark of trees, cut into the shape of tiles, and in a sloping position, for the rain to run off in the wet season. As we had no great provision of iron nails, we used for the purpose the strong pointed thorn of the acacia, which we had discovered the day before. We cut down a quantity of them, and laid them in the sun to dry, when they became as hard as iron, and were of essential service to our undertaking. We found great difficulty in peeling off a sufficient quantity of bark from trees to cover our roof. I began with cutting the bark en

tirely round at distances of about two feet all the length of the trunk; I next divided the intervals perpendicularly into two parts, which I separated from the tree by sliding a wedge under the corners, to raise the bark by degrees: I next placed the pieces on the ground, with stones laid on them to prevent their curving, to dry in the sun; and lastly I nailed them on the roof, where they had the appearance of fishes' scales—an effect that was not only pleasing to the eye, but reminded us of the roofs of our native land.

On this occasion we made another agreeable discovery: my wife took up the remaining chips of the bark for lighting a fire, supposing they would burn easily; we were surprised by a delicious aromatic odour, which perfumed the air. On examining the half-consumed substance, we found some of the pieces to contain turpentine, and others gum-mastich, so that we might rely on a supply of these ingredients from the trees which had furnished the bark. It was less with a view to the gratifying our sense of smelling, than with the hope of being able to secure these valuable drugs for making a sort of pitch to complete our meditated boat, that we indulged

our earnestness in the pursuit. The instinct of our goats, or the acuteness of their smell, discovered for us another pleasing acquisition: we observed with surprise, that they ran from a distance to roll themselves on some chips of a particular bark which lay on the ground, and which they began to chew and eat greedily. Jack seized a piece also, to find out what could be the reason of so marked a liking as the goats had shown. My wife and I then followed his example, and we were all convinced that the chips were cinnamon, though not so fine a sort as that from the isle of Ceylon.

This new commodity was certainly of no great importance to us; but we regarded it with pleasure, as it might assist to distinguish some day of rejoicing. The tree from which we had taken our bark was old: I remembered to have read, that young trees produce this spice in much greater perfection.

After our next meal we resumed with ardour our undertaking of the farm-house, which we continued without interruption for several days. A door was placed in the middle of the front. We next arranged the interior with as much convenience as the shortness

of the time and our reluctance to use all our timber would allow; we divided it half-way up by a partition wall into two unequal parts; the largest was intended for the sheep and goats, and the smallest for ourselves, when we should wish to pass a few days here. At the further end of the stable we fixed a house for the fowls, and above it a sort of hay-loft. Before the door of entrance we placed two benches, contrived as well as we could of laths and odd pieces of wood, that we might rest ourselves under the shade of the trees, and enjoy the exquisite prospect which presented itself on all sides. Our own apartment was provided with a couple of the best bedsteads we could make of twigs of trees, raised upon four legs, two feet from the ground, and these were destined to receive our cotton mattresses. Our aim was to content ourselves for the present with these slight hints of a dwelling, and to consider hereafter what additions either of convenience or ornament could be made. All we were now anxious about, was to provide a shelter for our animals, which should fix them in the habit of assembling every evening in one place. For several days, at first, we took care to fill their troughs

with their favourite food, mixed with salt, and we agreed that we would return frequently to repeat this indirect mode of invitation for their society, till they should be entirely fixed in their expectation of finding it.

I had imagined we could accomplish what we wished at the farm in three or four days; but we found in the experiment that a whole week was necessary, and our victuals fell short before our work was done. I could not prevail upon myself to return to Falcon's Stream before I had completed my intentions at the farm, and the other objects of my journey. I had even come to the determination of raising another building upon the site of Cape Disappointment; I therefore decided, that on this trying occasion I would invest Fritz and Jack with the important mission. They were accordingly despatched to Falcon's Stream, and to Tent House, to fetch new supplies of cheese, ham, potatoes, dried fish, manioc bread, for our subsistence, and also to distribute fresh food to the numerous animals we had left there. I directed one to mount the onagra, and the other the buffalo. My two boys set off with a brisk trot; they at my desire took with them the old ass, to bring the

load of provisions. Fritz was to lead him with a bridle, while Jack smacked a whip near his ears to quicken his motions; and certainly, whether from the influence of climate, or the example of his companion the onagra, he had lost much of his inactivity; and this was the more important, as I intended to make a saddle for my wife to get on his back, and relieve herself occasionally from the fatigue of walking.

During the absence of the boys, I rambled with Ernest about the neighbouring soil, to make what new discoveries I could, and to procure, if possible, additions to our store of provisions. We followed the winding of a river towards the middle of the wall of rocks; our course was interrupted by a marsh which bordered a small lake, the aspect of which was beautiful. I perceived, with joyful surprise, that the whole surface of the swampy soil was covered with a kind of wild rice, ripe on the stalk, and which attracted large flocks of birds. As we approached, a loud rustling was heard, and we distinguished on the wing, bustards, Canada heath-fowl, and great numbers of smaller birds. We succeeded in bringing down five or six of them, and I

was pleased to remark in Ernest a justness of aim that promised well for the future. The habits of his mind discovered themselves on this as on many previous occasions; he betrayed no ardour, he did every thing with a slowness that seemed to imply dislike; yet the cool deliberation and constancy he applied to every attempt so effectually assisted his judgment, that he was sure to arrive at a more perfect execution than the other boys.

Presently we saw Master Knips jump from Flora's back, and smell along the ground among some thick growing plants, then pluck off something with his two paws, and eat it. We ran to the spot to see what it could be, when, to the relief of our parched palates, we found he had discovered there the largest and finest kind of strawberry, which is called in Europe the *Chili* or *pine strawberry*.—On this occasion, the proud creature man generously condescended to be the imitator of a monkey: we threw ourselves upon the ground, as near to Knips as we could creep, and ate as fast as we could swallow. Many of these strawberries were of an enormous size, and Ernest, after eating an immense quantity, recollected his absent friends, and filled a

small gourd-shell with the finest fruit, then covered them with leaves, and tied them down with a tendril from a neighbouring plant, to present them in perfection to his mother. I, on my part, gathered a specimen of the rice to offer, that she might inform us if it was fit for cooking.

Pursuing our way a little further along the marsh, we reached the lake, which we had seen with so much pleasure from a distance, and whose banks, being overgrown with thick underwood, were necessarily concealed from the view we had taken of surrounding objects, particularly as the lake was situated in a deep and abrupt valley. No one, who is not a native of Switzerland, can conceive the emotion which trembled at my heart, as I contemplated this limpid, azure, undulating body of water, the faithful miniature of so many grand originals, which I had probably lost sight of for ever! My eyes swam with tears! Alas! a single glance upon the surrounding picture, the different characters of the trees, the vast ocean in the distance, destroyed the illusion, and brought back my ideas to the painful reality, that I and mine were—strangers in a desert island!

Another sort of object now presented itself to confirm the certainty that we were no longer inhabitants of Europe: it was the appearance of a quantity of swans gliding over the surface of the lake; but their colour, instead of white, like those of our country, was a jetty black, and their plumage had so high a gloss as to produce, reflected on the water, the most astonishing effect. The six large feathers of the wings of this bird are white, exhibiting a singular contrast to the rest of the body; in other respects these birds were remarkable, like those of Europe, for the gracefulness of their motions, and the voluptuous ease of their nature. Some of the swans pursued their course on the bosom of the blue water; others stopped and seemed to hold deliberations with their companions, or to admire themselves, or caress each other; many young ones followed in the train of the parent bird, who frequently turned half round, in execution of her matronly office. This was a spectacle which I could not allow to be interrupted by bloodshed, though Ernest, rendered a little vain by his success and my praise, would have been ready to fire upon the swans, if I had not absolutely forbidden the attempt;

at the same time I consoled him with the promise, that we would endeavour to obtain a pair of the creatures for our establishment at Falcon's Stream.

Flora at this moment dragged out of the water a creature she had killed. It was somewhat in shape like an otter, and, like the tribe of water-birds, web-footed: its tail was long and erect, and covered with a soft kind of hair; the head was very small, and the ears and eyes were almost invisible; to these was added a long flat bill, like that of a duck, which extended from its snout, and produced so ludicrous an effect that we could not resist a hearty laugh. All the science of the learned Ernest, joined with my own, was insufficient to ascertain the name and nature of this animal. We had no resource but to remain ignorant; in the mean time we christened it by the name of *Beast with a bill*, and decided that it should be carefully stuffed and preserved.

We now began to look for the shortest path for returning to the farm, which we reached at the same time with Fritz and Jack, who had well performed the object of their journey. We, on our parts, produced our offering of strawberries and our specimen of rice, which

were welcomed with shouts of pleasure and surprise.

The beast with a bill was next examined with eager curiosity, and then laid aside for the plan I had formed. My wife proceeded to pluck and salt the birds we had killed, reserving one fresh for our supper, which we partook of together upon the benches before the door of our new habitation. We laid a large provision of grain for the fowls within their house, and began arrangements for our departure.

The following day we took a silent leave of our animals, and directed our course towards the eminence in the vicinity of Cape Disappointment; we ascended it, and found it in every respect adapted to our wishes. From this eminence we had a view over the country which surrounded Falcon's Stream in one direction, and in others of a rich landscape, comprehending sea, land, and rocks. When we had paused for a short time upon the beau ties of the scene, we agreed with one voice, that it should be on this spot we would build our second cottage. A spring of the clearest water issued from the soil near the summit, and flowed over its sloping side, forming agree

able falls in its rapid course; in short, every feature of the picture contributed to form a landscape worthy the homage of a taste the most delicate and refined.—"Let us build here," exclaimed I, to which my wife and all agreed.

We lost no time in again setting to work; our experience at the farm enabled us to proceed with incredible rapidity, and our success was in every respect more complete. The building contained a dining-room, two bed-chambers, two stables, and a store-room for preserving all kinds of provisions for man and beast. We formed the roof square, with four sloped sides, and the whole had really the appearance of a European cottage, and was finished in the short space of six days. What now remained to be done was to fix on a tree fit for my project of a boat. After much search, I at length found one of prodigious size, and in most respects suitable to my views.

It was, however, no very encouraging prospect I had before me, being nothing less than the stripping off a piece of the bark that should be eighteen feet in length, and five in diameter; and now I found my rope-ladder of signal service; we fastened it by one end

to the nearest branches, and it enabled us to work with the saw, as might be necessary, at any height from the ground. Accordingly, we cut quite round the trunk in two places, and then took a perpendicular slip from the whole length between the circles; by this means we could introduce the proper utensils for raising the rest by degrees, till it was entirely separated. We toiled with increasing anxiety, at every moment dreading that we should not be able to preserve it from breaking, or uninjured by our tools. When we had loosened about half, we supported it by means of cords and pulleys; and when all was at length detached, we let it down gently, and with joy beheld it lying safe on the grass. Our business was next to mould it to our purpose, while the substance continued moist and flexible.

The boys observed that we had now nothing more to do than to nail a plank at each end, and our boat would be as complete as those used by the savages; but, for my own part, I could not be contented with a mere roll of bark for a boat. I made them assist me to saw the bark in the middle of the two ends, the length of several feet; these

two parts I folded over till they ended in a point; I kept them in this form by the help of the strong glue I had before made from fish-bladders, and pieces of wood nailed fast over the whole: this operation tended to widen the boat in the middle, and thus render it too flat a form; but this we counteracted by straining a cord all round, which again reduced it to the due proportion, and in this state we put it in the sun to harden and fix. Many things were still wanting to the completion of my undertaking, but I had not with me proper tools: I therefore despatched the boys to Tent House, to fetch the sledge, and convey it there for our better convenience in finishing.

Before our departure for Tent House, we collected several new plants for our kitchen-garden; and lastly, we made another trip to the narrow strait at the end of the wall of rocks, resolved, as I before mentioned, to plant there a sort of fortification of trees, which should produce the double effect of discouraging the invasion of savages, and allowing us to keep our pigs on the other side, and thus secure our different plantations from the chance of injury. We accomplished

all these intentions to our entire satisfaction; and, in addition, we placed a slight drawbridge across the river beyond the narrow pass, which we could let down or take up at pleasure on our side. We now hastened our return, and after a night's repose we loaded the sledge with the boat and other matters, and returned to Tent House.

As soon as we had despatched some necessary affairs, we resumed the completion of the boat: in two days she had received the addition of a keel, a neat lining of wood, a small flat floor, benches, a small mast and sail, a rudder, and a thick coat of pitch on the outside, so that the first time we saw her in the water, we were all in ecstasies at the appearance she made.

Our cow in the mean time had brought forth a young calf, a male; I pierced its nostril, as I had so successfully practised with the buffalo, and it gave promise of future docility and strength.

We had still two months in prospect before the rainy season, and we employed them for completing our abode in the grotto, with the exception of such ornaments as we might have time to think of during the long days of

winter. We made the internal divisions of planks, and that which separated us from the stables, of stone, to protect us from the offensive smell occasioned by the animals. Our task was difficult, but from habit it became easier every day. We took care to collect or manufacture a sufficient quantity of all sorts of materials, such as beams and planks, reeds and twigs for matting, pieces of gypsum for plaster, &c. &c. At length the time of the rainy season was near at hand, and we thought of it with pleasure, as it would put us in possession of the enjoyments we had procured by such unremitting industry and fatigue. We had an inexpressible longing to find ourselves settled, and at leisure to converse together on the subject of all the wondrous benefits bestowed upon us by an ever-watchful and beneficent Providence!

We plastered over the walls of the principal apartments on each side with the greatest care, finishing them by pressure with a flat smooth board. This ornamental portion of our work amused us all so much, that we began to think we might venture a step further in European luxury, and agreed that we would attempt to make some carpets with the hair of our goats. To this effect we

smoothed the ground in the rooms we intended to distinguish, with great care; then spread over it some sail-cloth, which my wife had joined in breadths, and fitted exactly; we next strewed the goats' hair, mixed with wool obtained from the sheep, over the whole; on this surface we threw some hot water, in which a strong cement had been dissolved; the whole was then rolled up, and was beaten for a considerable time with hard sticks; the sail-cloth was now unrolled, and the inside again sprinkled, rolled, and beaten as before; and this process was continued till the substance had become a sort of felt, which could be separated from the sail-cloth, and was, lastly, put in the sun to harden. We thus produced a very tolerable carpet: of these we completed two; one for our parlour, and the other for our drawing-room, as we named them: both of which were fit for our reception by the time the rains had set in.

All we had suffered during this season in the preceding year doubled the value of the comforts and conveniences with which we were now surrounded. We were never tired of admiring our warm and well-arranged apartments, lighted with windows, and well secured with doors from wind and rain, and

our barn filled with more than a sufficient winter supply of food for ourselves and for our cattle. In the morning, our first care was to feed and give them drink; and both these were now constantly at hand, without the pains of fetching or preparing: after this we assembled in the parlour, for prayers and breakfast: we then adjourned to the common room, where all sorts of industry went forward, and which contained the spinning-wheel and loom I had constructed to gratify my wife. Here all united in the business of producing different kinds of substances, which she afterward made into apparel. I had also contrived to construct a turning machine, having used for the purpose one of the small cannon wheels, with the help of which the boys and I managed to produce some neat utensils for general use. After dinner, our work was resumed till night, when we lighted candles; and as they cost no more than our own trouble in collecting and manufacturing the materials, we did not refuse ourselves the pleasure of using many at a time to admire their lights splendidly reflected by the crystals everywhere pendent. We had formed a convenient portion of our dwelling into a small chapel, in

which we left the crystals as produced by nature; and they exhibited a wondrous assemblage of colonnades, porticoes, altars, which, when the place was lighted to supply the want of a window, presented a truly enchanting spectacle. Divine service was performed in it regularly every Sunday. I had raised a sort of pulpit, from which I pronounced such discourses as I had framed for the instruction of my affectionate group of hearers. Jack and Francis had a natural inclination for music: they accompanied their mother, who had a sweet-toned voice, the volume of which was doubled by the echoes of the grottoes, and they produced together a very pleasing little concert.

Thus, as will be perceived, we had made the first steps towards a condition of civilization: separated from society, condemned, perhaps, to pass the remainder of life in this desert island, we yet possessed the means of happiness; we had plenty of all the necessaries, and many of the comforts, desired by human beings! We had fixed habits of activity and industry; we were in ourselves serene and contented; our bodily health and strength increased from day to day; the sentiment of tender love was perfect in every heart; we every day acquired some new and

still improving channel for the exertion of our physical and moral faculties; we everywhere beheld, and at all times acknowledged, marks of the Divine wisdom and goodness; our minds were penetrated with love, gratitude, and veneration for the Providence who had rescued and preserved us, and conducted us to the true destination of man—that of providing by his labour for the wants of his offspring! I trusted in the same goodness for restoring us once more to the society of our fellow-men, or for bestowing upon us the means of founding in this desert a happy and flourishing colony of human beings; and waiting in silence for the further manifestation of his holy will, we passed our days in a course of industry, innocent pleasures, and reciprocal affection. Nearly two years have passed away without our perceiving the smallest trace of civilized or savage man; without the appearance of a single vessel or canoe upon the vast sea by which we are surrounded. Ought we then to indulge a hope that we shall once again behold the face of a fellow-creature?—We encourage thankfulness in each other, and wait with resignation the event!

THE END.

POSTSCRIPT BY THE EDITOR.

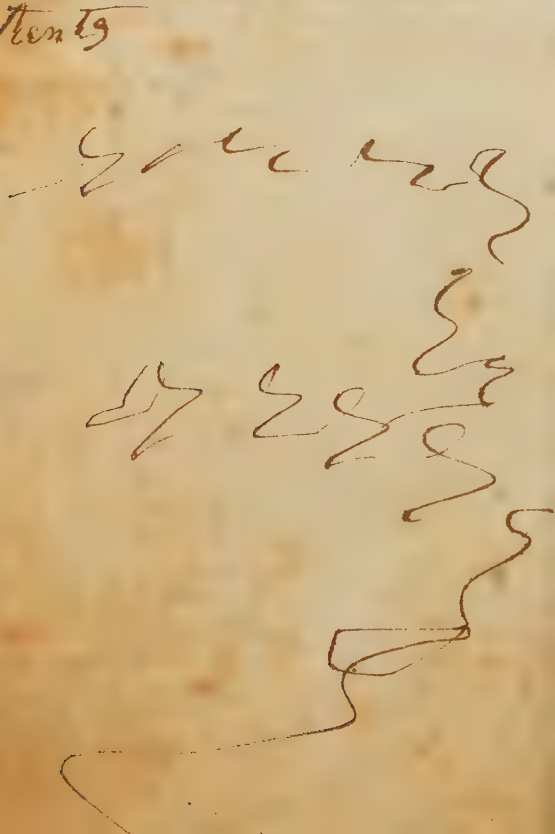
I HAVE presented the public with the part I had in my possession of the Journal of the Swiss Pastor, who, with his family, was shipwrecked on a desert island. It now remains for me to inform the reader by what means the Journal of the Swiss Pastor came into my possession.

Three or four years subsequent to the occurrence of the shipwreck of the pastor and his family, an English transport was driven by a tempest upon the same shore. The name of the vessel was *The Adventurer*, *Captain Johnson:* it was on a voyage from New Zealand to the eastern coast of North America, by Otaheite, in the South Seas, to fetch a cargo of skins and furs for China, and to proceed from Canton to England. A violent tempest of several days' duration drove it from its track. The vessel continued to beat about the unknown seas, and was now so injured by the weather, that the best hope of the captain and his company was to get into some port where they might refit. They discovered a coast with some high lands, and as the wind had somewhat abated, they made with all speed for the shore. When within a short distance, they cast their anchor, and put out a boat containing some of the officers, to examine the coast, and find a place for landing. They rowed backward and forward for some time without success: at length they turned a promontory, and perceived a bay whose calm waters seemed to invite their approach. This was the *Safety Bay* of the wrecked islanders: the boat

put on shore, and the officers with astonishment beheld the traces of the abode of man. A handsome, well-conditioned pinnace and a small boat were there at anchor: near the strand under a rock was a tent, and further on, in the rock, a house-door and windows announced European comforts and workmanship. The officers advanced towards the spot, and were met half-way by a man of middle age, dressed like a European, and armed with a gun. The stranger accosted them with friendly tones and gestures; he spoke first in German, and then some words in English. Lieutenant Bell, one of the English officers, who spoke the German language, answered. A mutual confidence immediately ensued. We need not add, that the stranger was the Family Robinson, whose wife and children happened at the moment to be at Falcon's Stream. He had discovered the English ship in the morning with his glass; and, unwilling to alarm his family, he had come, perceiving she bore that way, alone to the coast.

After an interchange of cordial feelings, and a hospitable reception of the officers at the dwelling, the Swiss Pastor put his Journal into the hands of Lieutenant Bell, to be conveyed to Captain Johnson, that he also might become acquainted with the story of the solitary islanders. At the end of an hour's conversation, the newly-found friends separated, in the pleasing expectation of meeting again on the following day.—But Heaven had otherwise ordained.

During the night the tempest revived with new terrors. The Adventurer could not be held at anchor, but was obliged to steer for safety to the bosom of the ocean. As there was no favourable change of weather for several days, the vessel was driven so far from the coast of Safety Bay, as to leave no possibility of returning, and Captain Johnson was compelled to renounce the gratification of

seeing this extraordinary family, or of proposing to convey them all to Europe.

Captain Johnson brought the Journal of the Swiss Pastor to England, whence it was transmitted to a friend in Switzerland, who has deemed its contents an instructive lesson to the world.